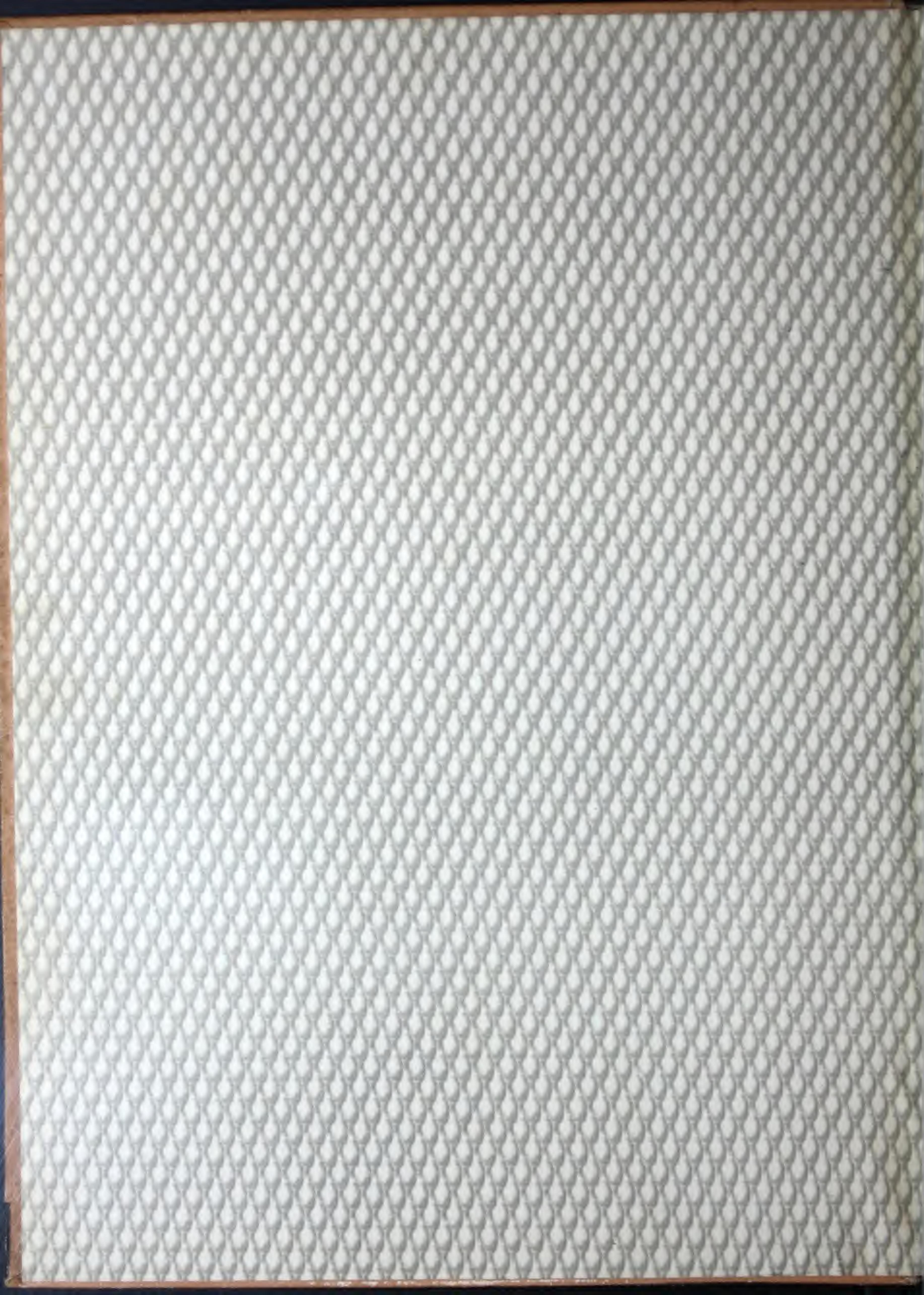


NO-FINES CONCRETE



A.I.H.

W I M P E Y







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CONCRETE

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Building and Civil Engineering Contractors

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Sierra Leone

Singapore

Sumatra

Syria

Tarkwa



Aerial view shows
a No-fines Housing Estate
at Birmingham

NO-FINES

CONCRETE

A record of permanent
structures built in
the new tradition

GEORGE WIMPEY & CO LIMITED

Hammersmith Grove, London, W.6

WIMPEY

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CONTENTS

Housing	9
Contracts	34
Reduced area Houses	35
Two, Three and Four Storey Flats	51
Multi-storey Housing	69
Technical data	81
Offices and Stores	83
Standard Hutting	92
Schools, Hostels and Barracks	97
No-fines Concrete Overseas	115
External finishes	122
Technical services	124

WHEN DOES NON-TRADITIONAL BECOME THE NEW TRADITION?

A glance at this book suggests this evolution has already taken place. Our purpose is to give some idea of the ramifications, the adaptability and effectiveness of the No-fines technique as developed by the Wimpey organization. No-fines concrete as such is nothing new. Its introduction into these islands from the Continent was recognized just after the first Great War. Use is made of the fact that all sand and fine stones are omitted from the aggregate so that the walls are cellular in construction; thus a No-fines house is just as comfortable as an eleven-inch brick cavity house and also has similar protection against capillary attraction of moisture. Many instances of the great speed of building attained by the use of this technique will be found later in this book. Suffice it to say at this point that every detail associated with housing and other structures, from the initial survey, design and site preparation to the completion of from one to eleven storeys, is encompassed. In the hands of the Wimpey organization this building method has been developed to such a high degree of ingenuity and efficiency that it is able not only to meet the swiftly changing needs of the national building programme, but in many cases to influence its form.



HOUSING



Photograph below shows the semi-detached type with bays; in the background can be seen a block of two-storey flats. Photograph taken at Farnborough

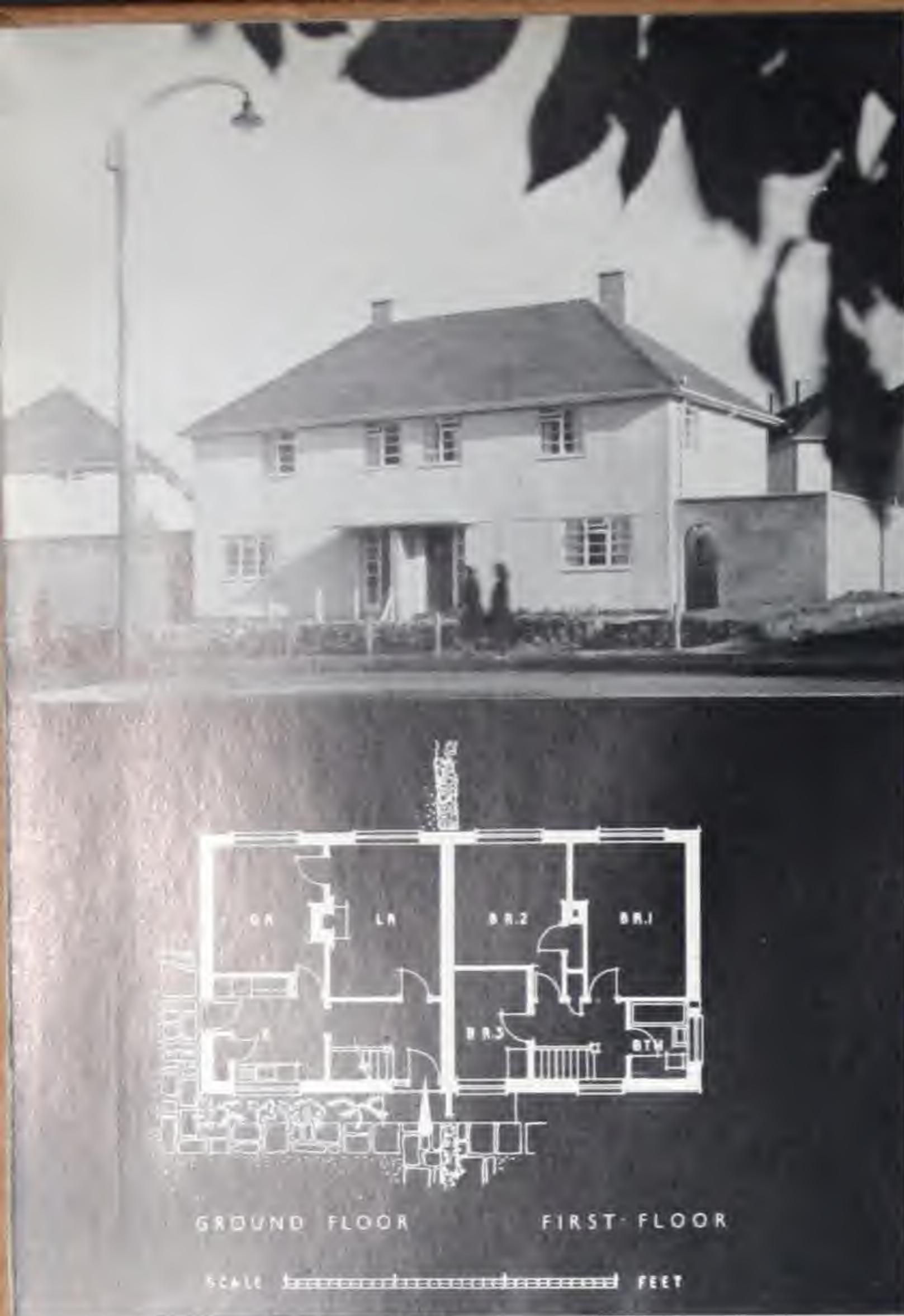


FLEXIBILITY OF DESIGN

One of the most common objections to a house constructed in anything other than brick is that no variety can be introduced into the design. That this objection is utterly defeated by the No-Fines technique can quite clearly be seen from the photographs on the opposite page.

It is, in fact, possible to build No-fines houses to suit almost any design, although naturally some designs are more economical than others. Many architects have adapted their plans to No-fines construction and large numbers of dwellings have been built to these plans.

Although No-fines dwellings have been built extensively throughout the country (for statistics see page 34), on the following pages are shown photographs taken in certain areas which we think are fairly representative of the many No-fines sites.



← Photo and plan show the north aspect type as built at Clifton



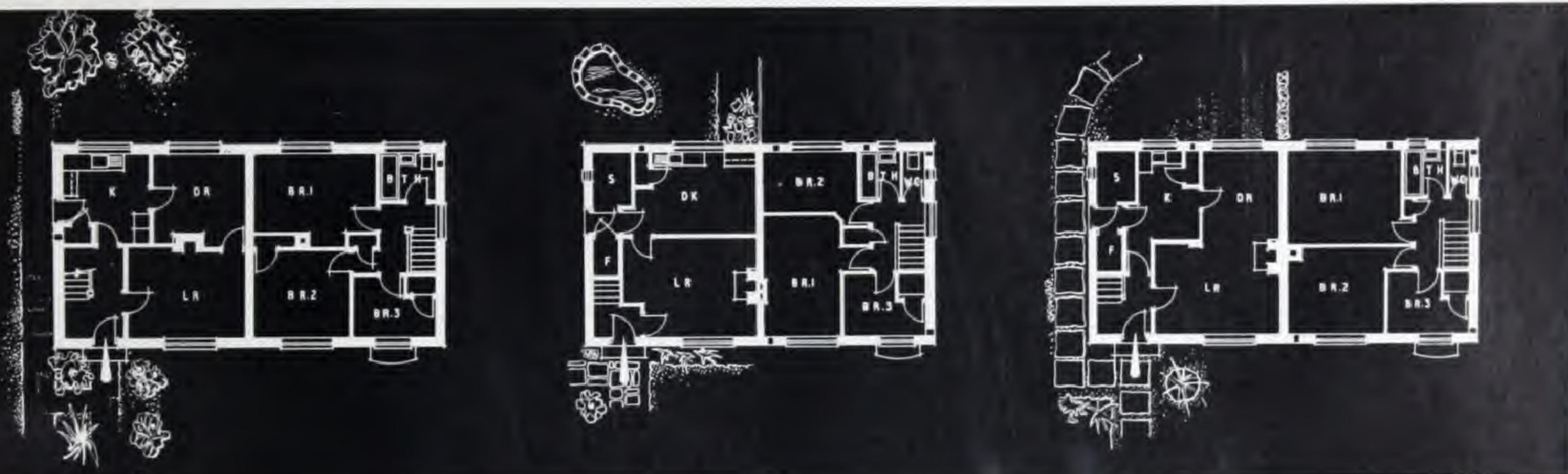
Photo shows how effective No-fines terraces can be with the introduction of tiled bays
Below: Aerial view of Clifton Estate



NOTTINGHAM AREA

- The largest contracts in this region have been carried out for the Nottingham City Council. Commencing with three separate contracts for 264, 308 and 298 houses respectively, we then graduated to 1,500 dwellings, comprising the Clifton Estate, which were completed in just over two years. We have recently been given a follow-on contract for 2,000 houses.
- Numerous other large contracts have been carried out in the region, and many repeat orders received.
- Three-storey flats have been built at Derby and Scunthorpe.

Plans below show typical semi-detached types



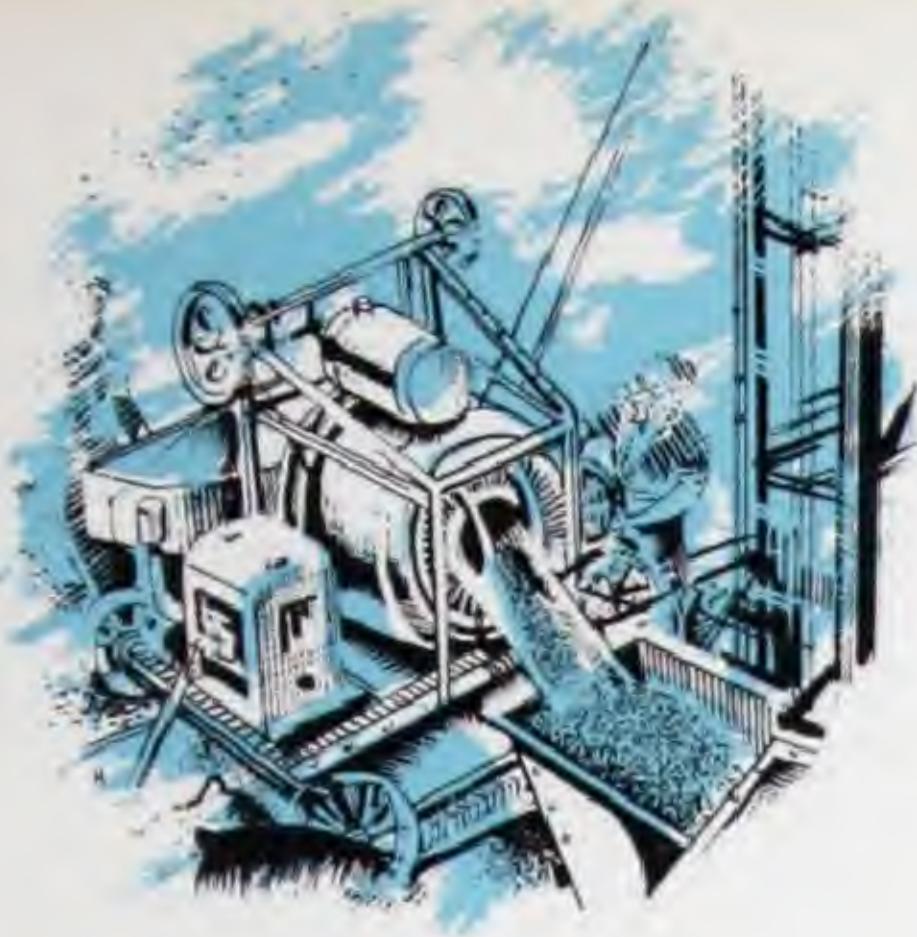
Here we show semi-detached pairs with bays, also terraces built in this region

Housing Architect : C. A. Pilkington L.R.I.B.A.

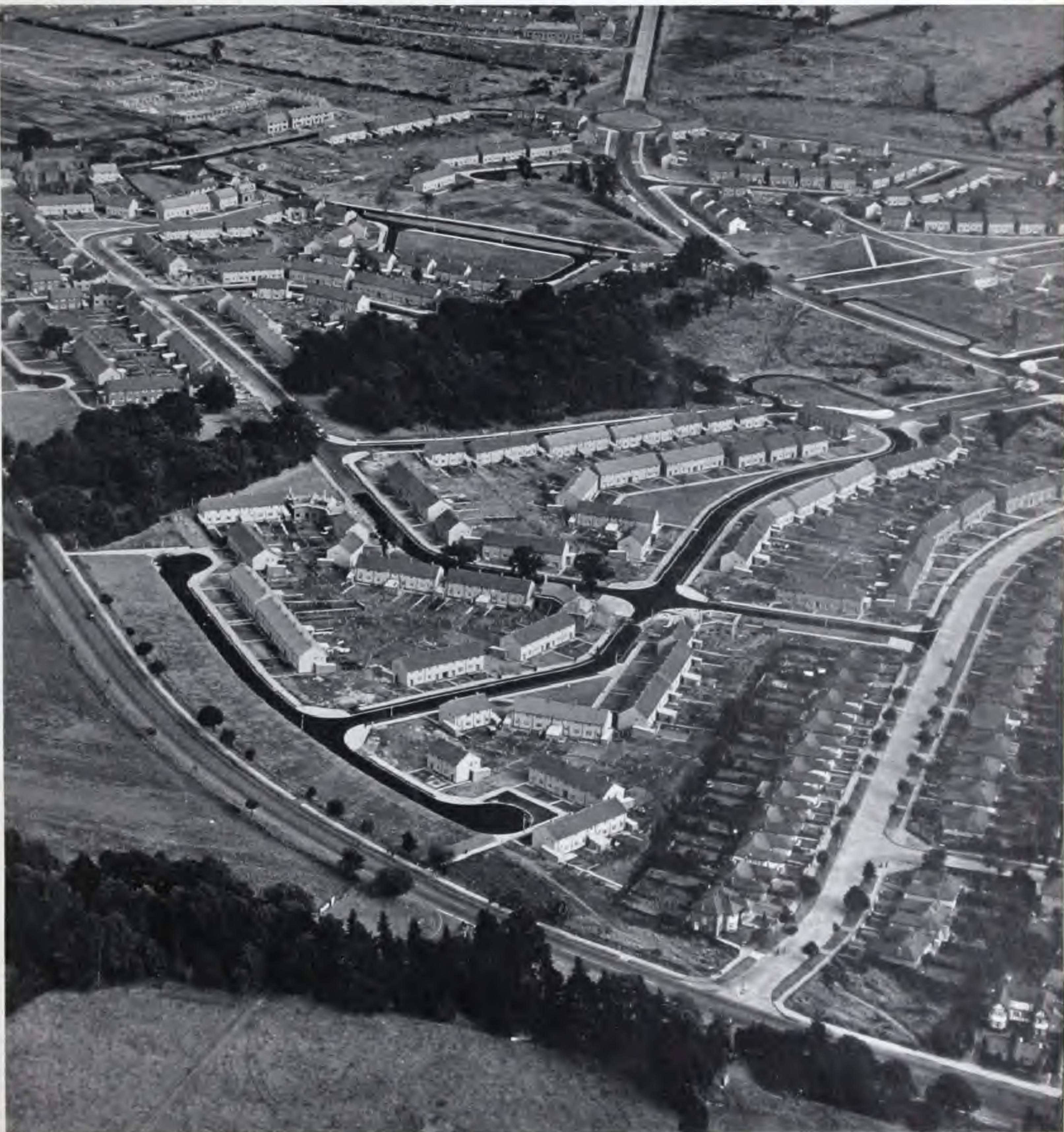




BIRMINGHAM AREA



It is in this area that much of the pioneer work on No-fines housing has been done. The first three-storey flat contract was completed at Coventry, and our first six-storey flats are at Tile Cross in Birmingham. Over 1,000 dwellings have now been completed for the Birmingham City Corporation, 700 more are in course of construction, and over 500 dwellings were handed over in one year—a striking example of the speed attained by the No-fines method.



- A** Shows terrace with bays built at BULKINGTON
- B** Corner treatment of semi-detached houses at SHARD END, BIRMINGHAM
- C** Close-up of one of the house types at WARWICK
- D** Semi-detached houses with bays at SHARD END, BIRMINGHAM
- E** Terraced types built on the same site
- F** Blocks built at WARWICK with brick link walls

FARNBOROUGH

In 1946 the first contract of 54 No-fines houses was begun at Farnborough. Since then seven further contracts have been completed for the U.D.C., and a total of 856 houses built. At Minley Road an estate of 200 houses was completed within sixteen months.

Many variations of design and elevation have been utilized in our work for this authority.

A current contract for 250 dwellings includes the first three-storey No-Fines flats to be built in Farnborough.

Engineer and Surveyor: I. C. Jenkins, B.Sc. A.M.I.C.E.



On the left are three typical street views. Below, a three-bedroom terraced block

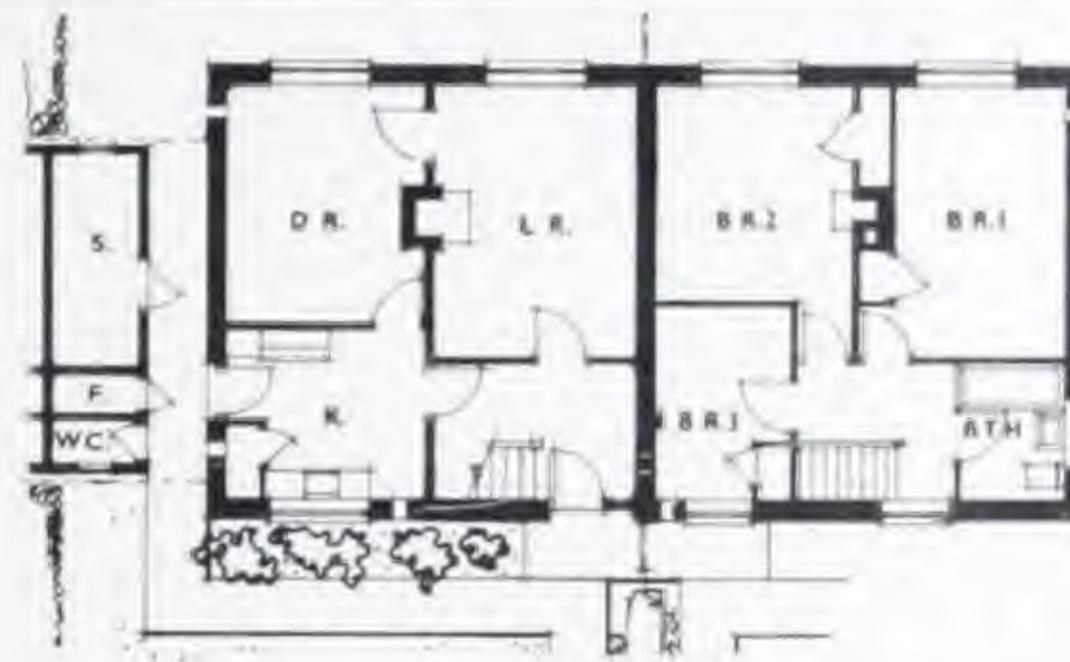
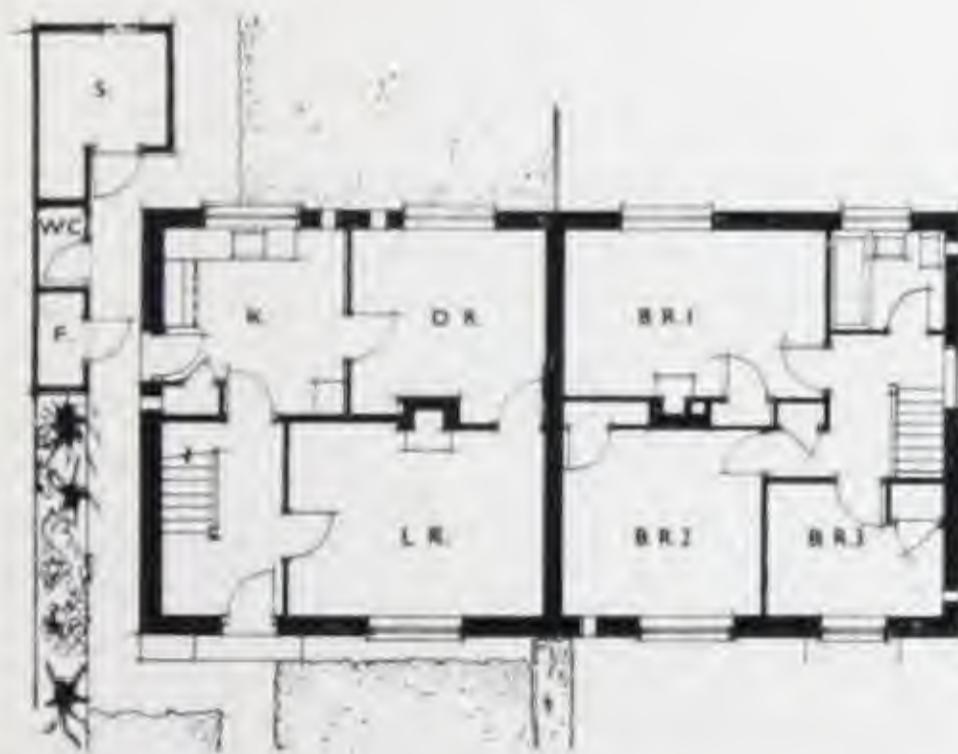


Terraced block with hipped roof and tiled bays. Photo on right shows how pleasing variation can be attained in a row of No-fines houses

On the right are two-storey flats, with hipped semi-detached pairs in background



The plans shown here are
two of the many types built at
Farnborough



NEW TOWNS

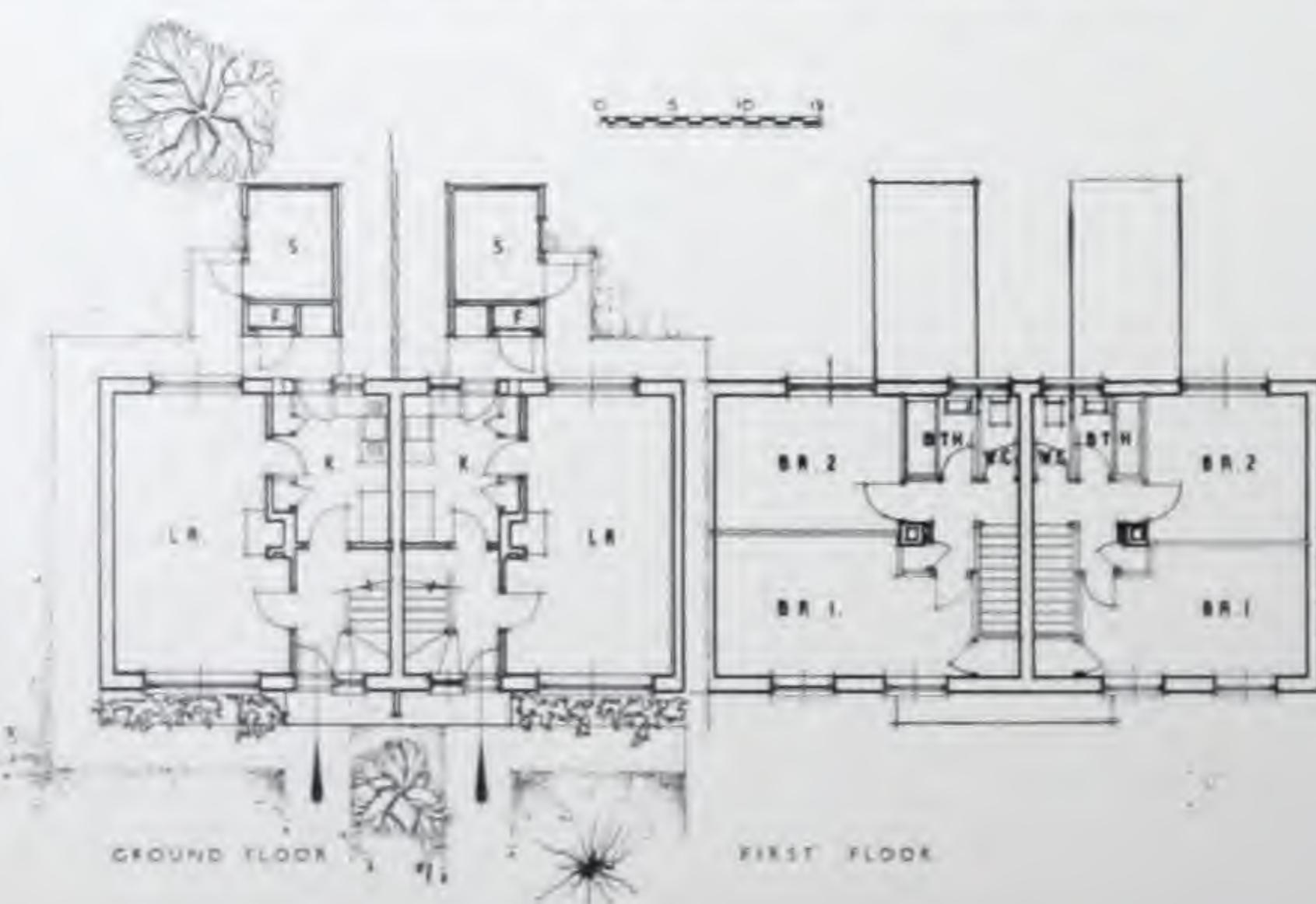
- Over the past few years architects to the Development Corporations have found that the No-fines system provides the flexibility and appearance which has enabled them to incorporate No-fines houses into their general schemes.
- At HARLOW, CWMBRAN, CORBY and HEMEL HEMPSTEAD we have been commissioned to build in No-fines concrete, houses designed by the Corporation architects, which have fitted in ideally with their traditional neighbours.
- At STEVENAGE and CRAWLEY we are building houses of our own design.



Site plan shows a section of one of the New Towns



Two-bedroom terrace type built at Harlow. See plan below.



At Harlow our No-fines contracts to date have comprised 310 two-bedroom houses on two sites. At Hemel Hempstead our contribution consists of both two and three-bedroom houses, and at Cwmbran we are building in No-fines two, three and four-bedroom houses.

In the new town at Corby we are in process of constructing maisonettes and terraces of three and four-bedroom houses, while at Peterlee the No-fines construction has so far been used in six experimental houses. In addition, negotiations with other Development Corporations are in progress. It is therefore apparent that the No-fines method has established a permanent foothold in the new towns of Great Britain.

Photographs show
Terraces of No-fines built for the
Cwmbran Development Corporation



Architects to the Development Corporations:

Crawley D.C.—H. S. Howgrave-Graham,
A.R.I.B.A., A.M.T.P.L.

Corby D.C.—Dr D. Harper, Ph.D., F.R.I.B.A.

Cwmbran D.C.—J. C. P. West, A.R.I.B.A., A.M.T.P.L.

Harlow D.C.—V. Hamnett, B.Sc., A.R.I.B.A., A.R.I.C.S.

Hemel Hempstead D.C.—H. K. Abblett, A.R.I.B.A.

Stevenage D.C.—D. P. Reay, M.Sc., B.Arch., A.R.I.B.A.

- 1 This sketch shows a terrace of north aspect three-bedroom houses at Cwmbran
- 2 Terrace of three and four-bedroom houses at Cwmbran
- 3 The tunnel access type, two-bedroom houses at Harlow
- 4 Sketch shows a block of two-bedroom houses



1

2

3

4



Coventry City Architect: D. E. E. Gibson, O.B.E., M.A., A.R.I.B.A., M.T.P.I.



The Tile Hill Neighbourhood Estate provides, by its very nature, a good example of the versatility of No-fines, and the comprehensive nature of the Wimpey technique. Old people's bungalows, one, two, three and four bedroom houses and flats combine to make this Estate cater for all sizes of family. It comprises over 1,000 dwellings and a dozen different plans have been used. In addition, roads and sewers have been constructed by Wimpeys.

A Semi-detached types with brick fronts

B Terrace of two bedroom houses (four persons)

C Old people's bungalows

Below is shown two and three bedroom south aspect type





COVENTRY

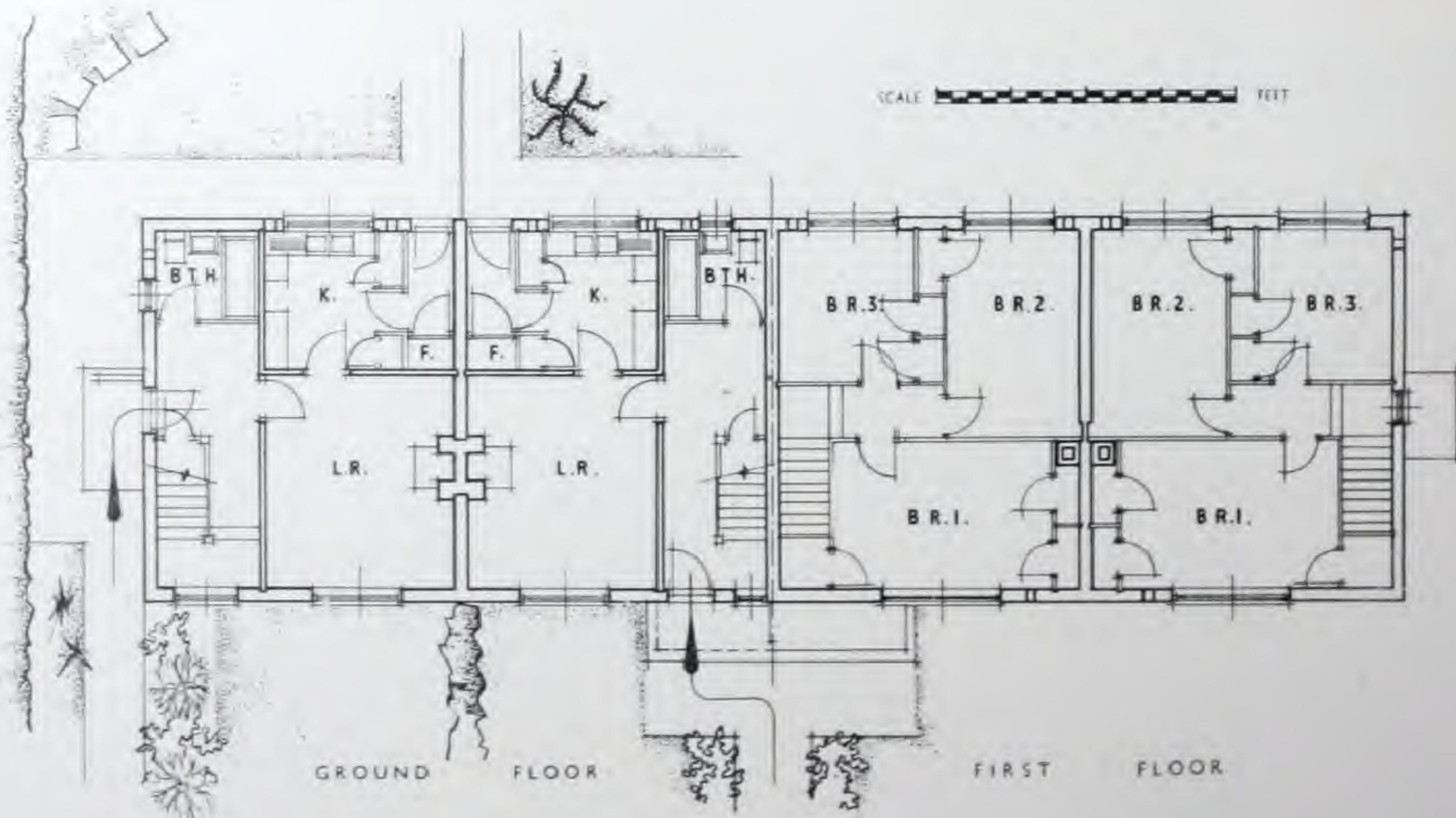
There can be no doubt that the No-fines system
has made a substantial contribution to the alleviation of the
housing problem in Coventry.

Aerial views show parts of the Tile Hill Estate.



SCOTLAND

These houses at Kirkcaldy, comprise two and three-bedroom dwellings, and are built to plans approved by the Department of Health for Scotland. In general, houses in Scotland have a slightly larger superficial area than their counterparts in England, and are built to a rather different specification. The houses pictured here are on a sloping site and involved the use of special foundation work.





The terrace shown above was built on a steep incline; note the stepping between blocks. The photo below shows a pair of semis in juxtaposition with three-storey flats.



Burgh Surveyor: R. Meldrum, A.M.I.C.E., A.M.T.P.I.

Also in Kirkcaldy are a number of three-storey flats, the first block of which was handed over within fifteen weeks of our commencing work on the site.

Another feature of No-fines construction in Scotland as a whole is that of erecting shells for a house which has a prefabricated interior—yet another example of the versatility of this method.





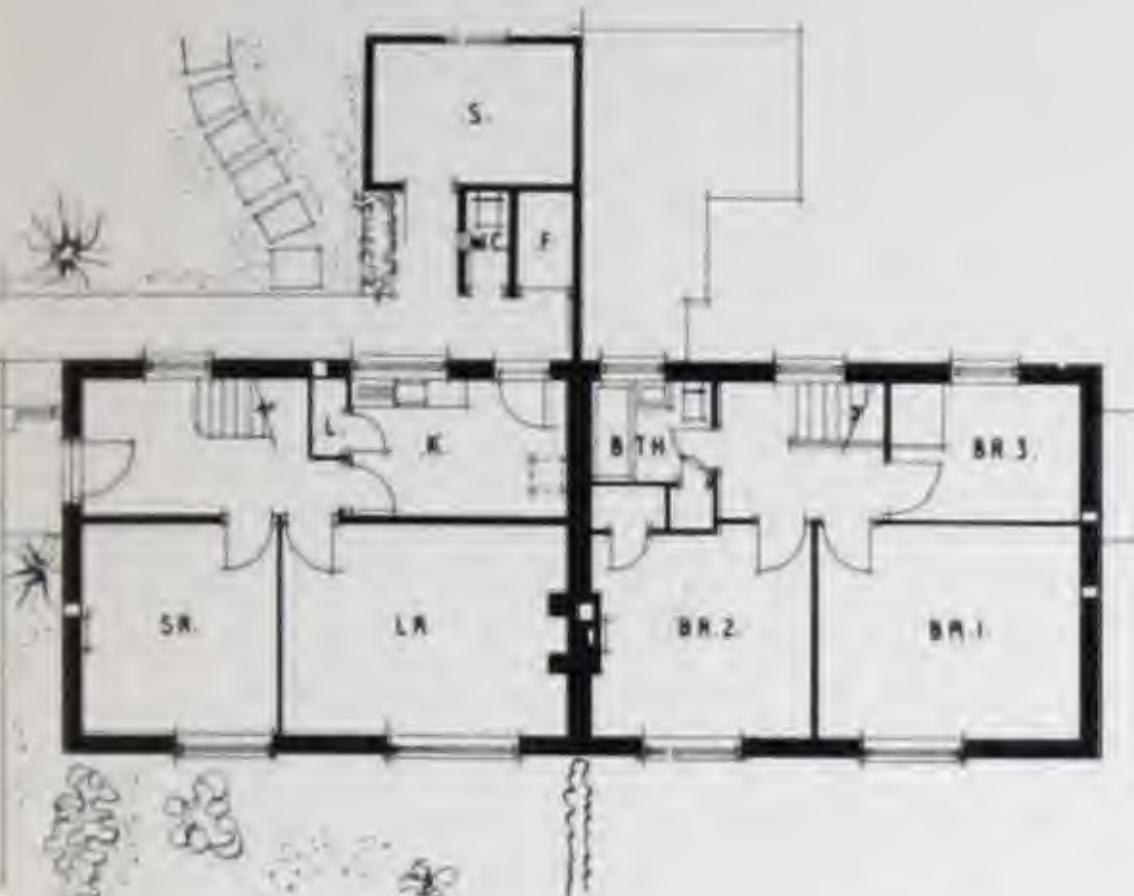
Stepped terraces of No-fines houses
at St Julien's Estate, Newport

Architect: Johnson Blackett, F.R.I.B.A., R.I.B.A.



No-fines houses built at Swansea

*Architect: H. T. Wykes, F.R.I.B.A.,
A.M.T.P.I., F.R.San.I.*

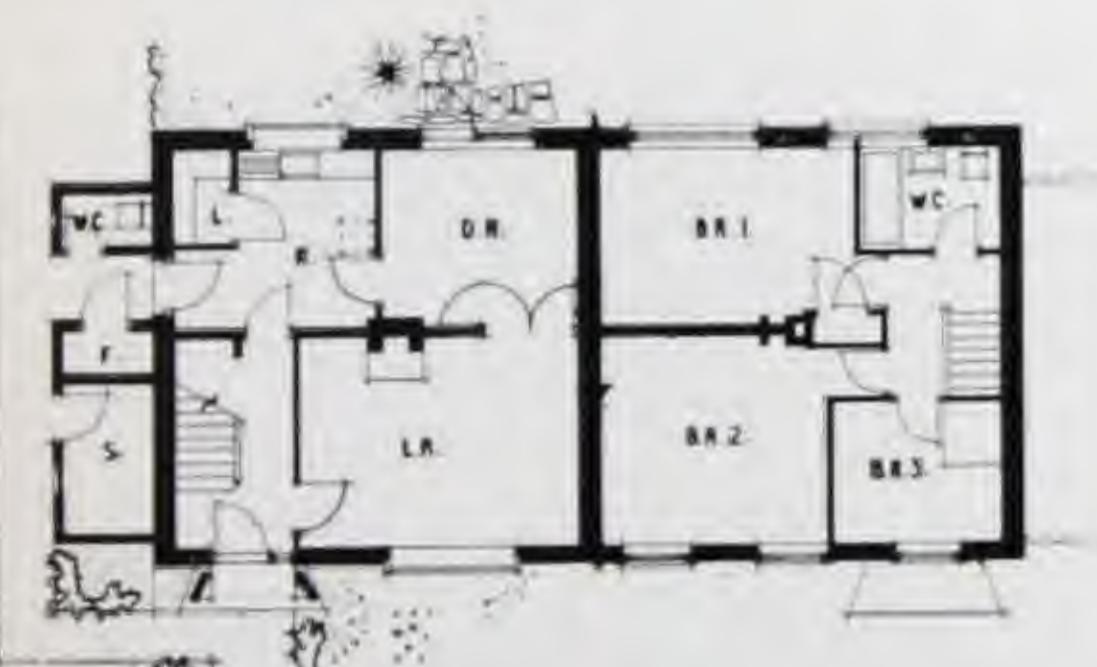


This plan and photograph on right show three-bedroom semi-detached types built at Port Talbot

Engineer and Surveyor:
G. V. Griffiths, A.M.I.C.E., M.B.E.

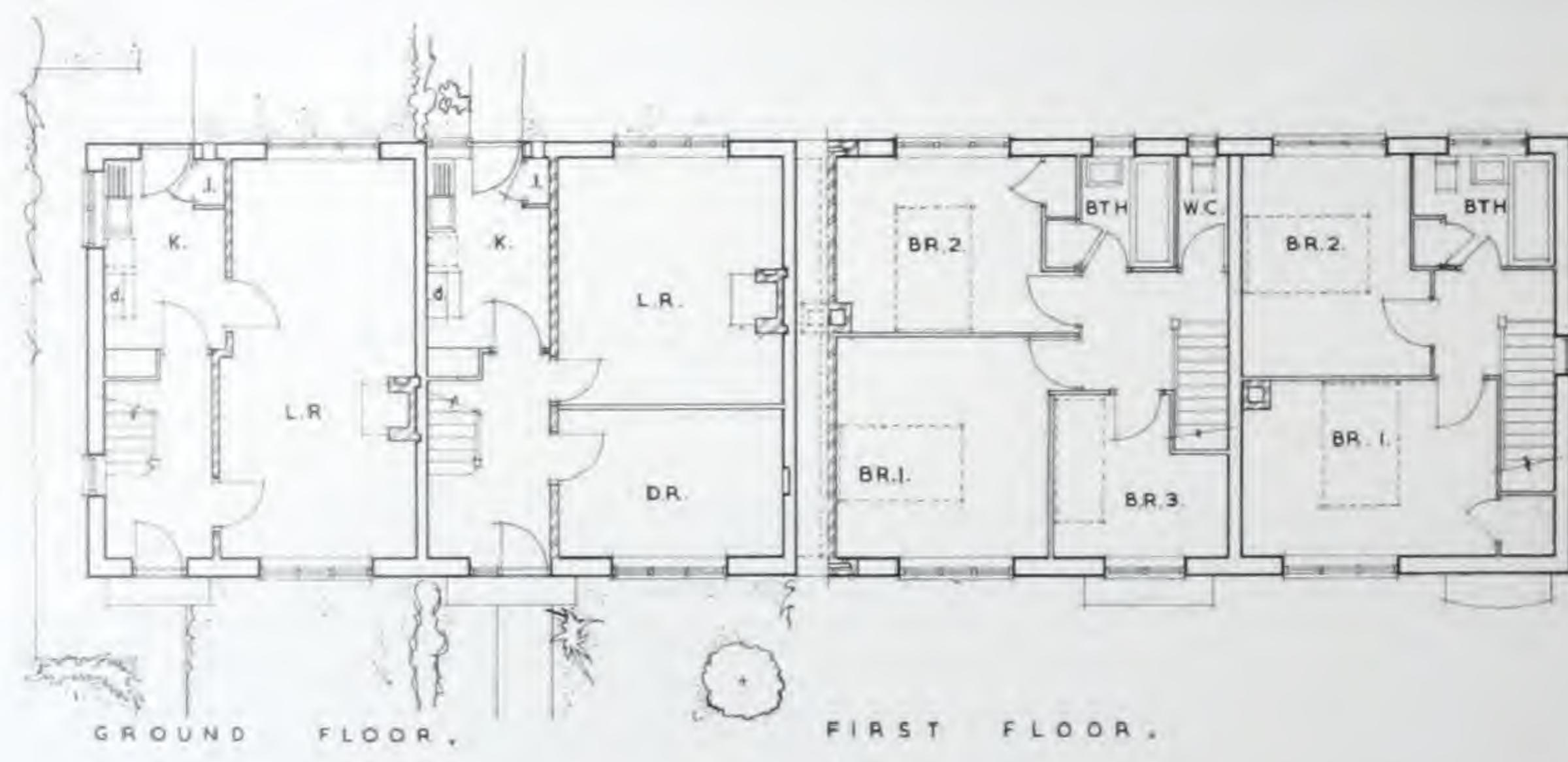
SOUTHERN WALES

Plan shows three-bedroom semis with flat roof.
Photograph taken at the St Julien's Estate



These photographs show examples of the varied types of No-fines houses which are being built for local authorities in South Wales. Well over 1,000 houses were completed and handed over in the area during 1952. In many districts there is a marked shortage of bricks, and No-fines provides an invaluable part of the over-all building programme. At Port Talbot the first contract of 250 houses, which was completed in seventeen months, has helped to meet the extra housing demand brought about by the opening of the new steel works at Margam.





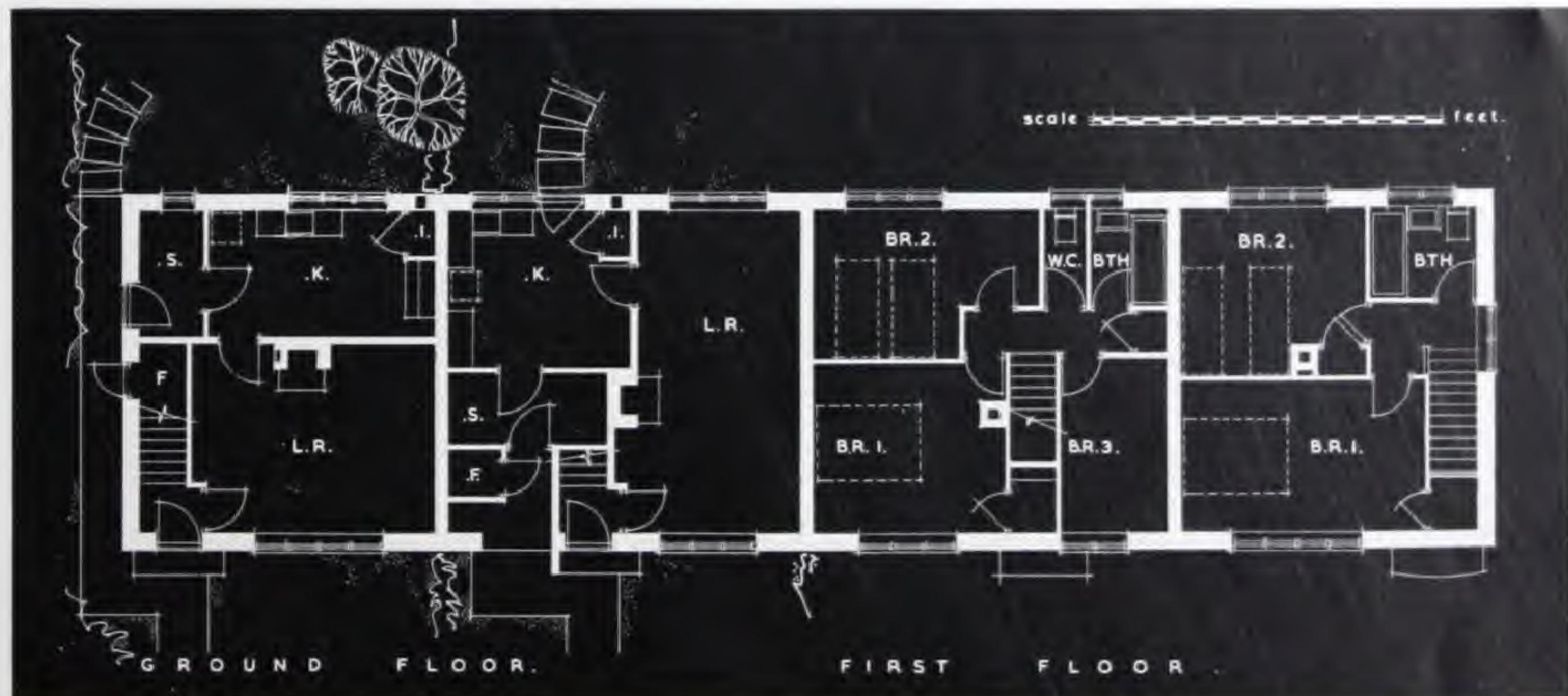
MANCHESTER AREA

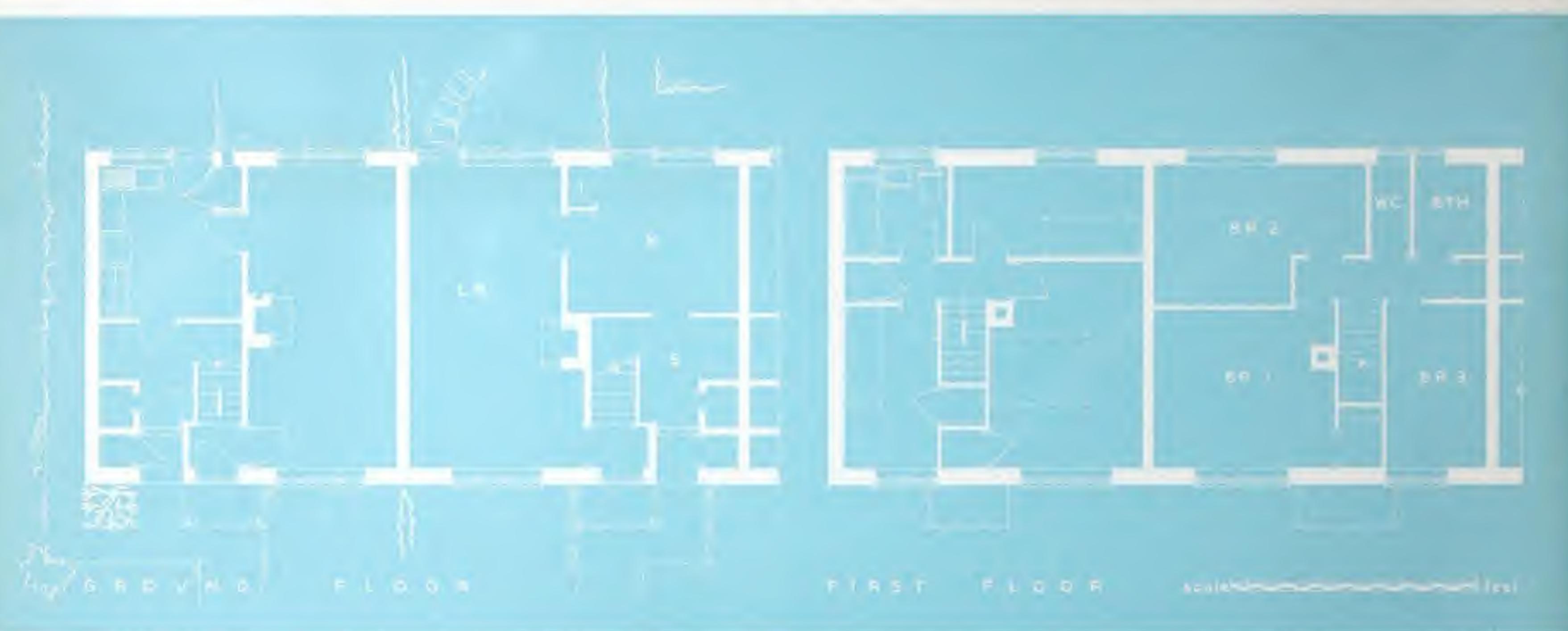


In this area well over 5,000 dwellings are in course of construction, including many three-storey flats. Among the houses built are miners' dwellings, the new reduced area houses, and many more to the design of local authorities. At Bradford one contract of 186 houses was built on a very hilly site, and is a good illustration of our ability to overcome this particular obstacle. A further contract for 226 houses is in course of construction. At Stockport six demonstration 'People's Houses' were built in eight weeks, and served as an immediate and impressive illustration of the value of the new plans. The three-storey flats built at Manchester were to the design of the City Corporation, and once again show that the No-fines system is readily adaptable to local requirements.

Director of Housing:

A. MacKenzie, Esq., L.R.I.B.A.



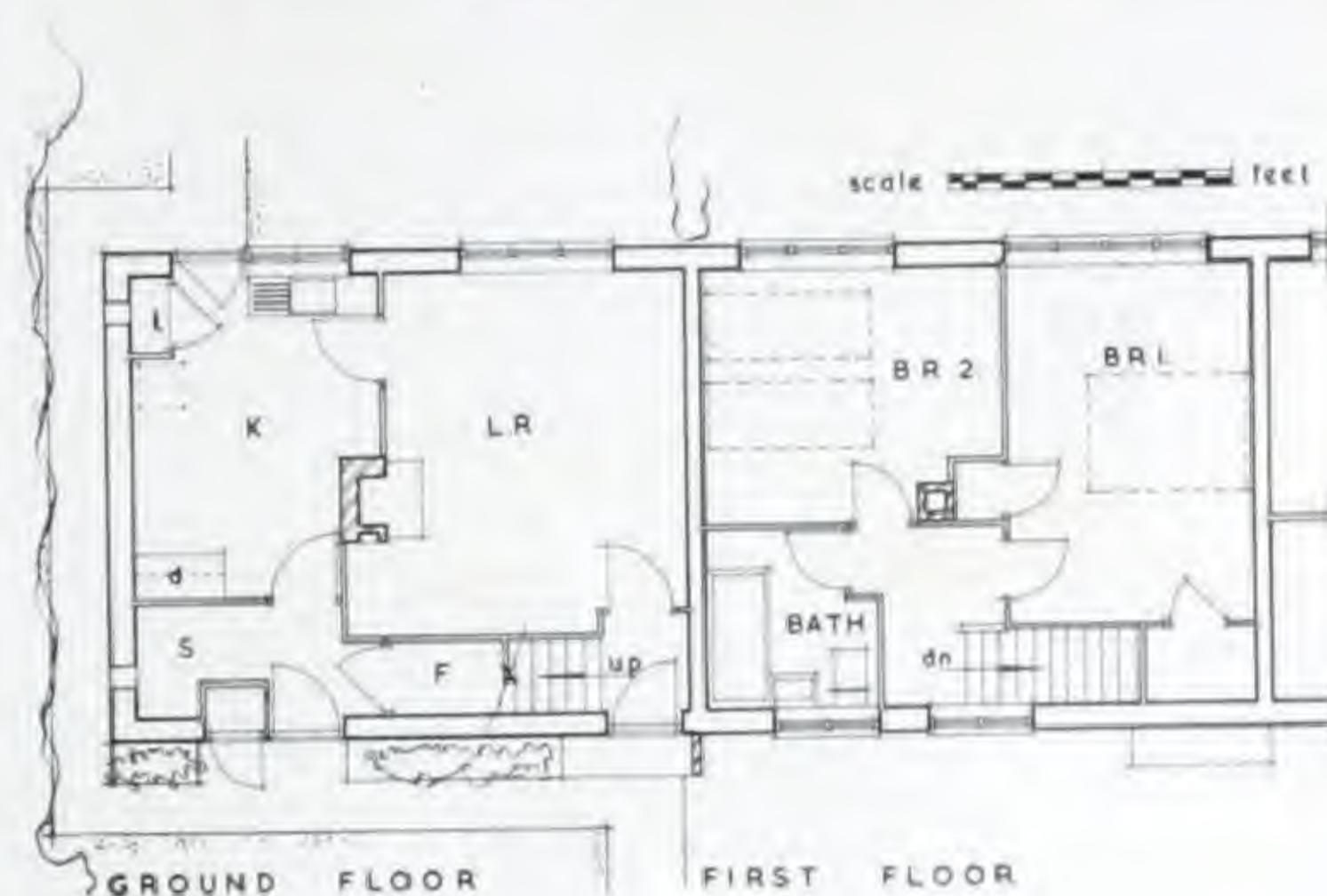


NEWCASTLE AREA

In an area which has a post-war traditional housing record second to none in the country, there are over 1,000 No-fines houses and flats in course of construction. In Newcastle itself 252 three-storey flats at Slatyford Lane were poured within six months of our first going on to the site. The Minister of Housing and Local Government visited and commented very favourably upon this estate. At Harrogate, too, progress has been particularly noteworthy. Elsewhere, the new reduced area designs have been widely used, and in some instances our plans have been adapted to meet the special requirements of individual authorities.

Newcastle City Architect:
G. Kenyon, Dip.Arch., A.R.I.B.A.

Illustrations show various house types built at Dishforth and Newcastle.





OTHER NO-FINES SITES



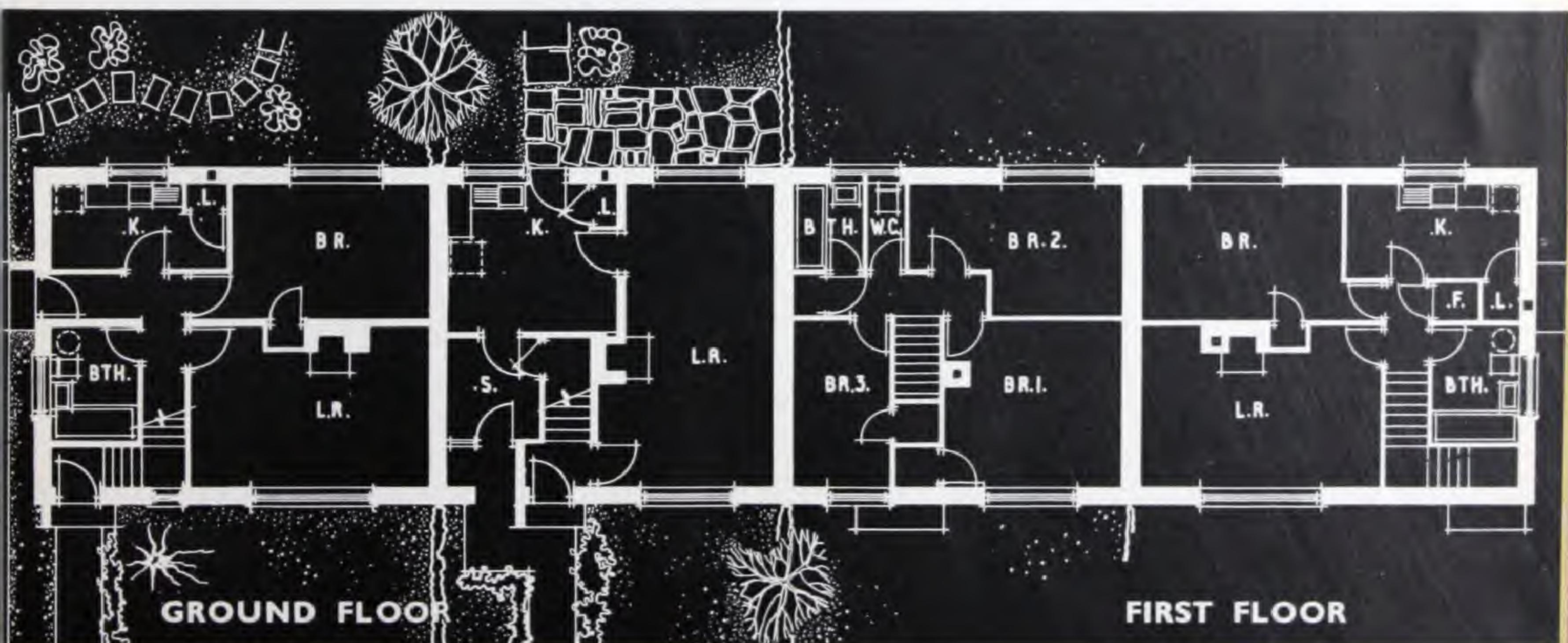
One of the great advantages of the Wimpey organization lies in its ability to carry out every aspect of estate development. On many of the largest schemes where No-fines houses have been built we have also constructed the roads and sewers. When this occurs the planning of the estate is carried out as a unified whole and the houses follow close behind the site development. In many cases our department dealing with estate development has assisted councils in their efforts to secure the greatest benefit from a site. Sometimes the local authority itself maintains common front gardens, providing a very pleasing effect. Elsewhere, according to local conditions, the gardens are enclosed.



One perennial problem in the setting out of large estates is the treatment of corners. This aspect is under constant review, and a one-bedroom flat is one of several ways of overcoming the problem of the back garden, which continually crops up in this connection. The garden is, of course, not nearly so important when a small flat is involved.



Photograph and plan show a block of three-bedroom houses





Photograph shows a curved terrace of No-Fines houses at St. Julien's Estate, Newport, South Wales

Architect: Johnson Blackett, F.R.I.B.A., R.I.B.A.





OTHER NO-FINES SITES—cont'd



NO-FINES HOUSING CONTRACTS

BIRMINGHAM AREA

Bedworth U.D.C.
Bilston B.C.
Birmingham B.C.
Burton B.C.
Cosford Air Ministry
Coventry City Council
Dawley U.D.C.
Keresley (C.I.H.A.)
Kidderminster B.C.
Leamington B.C.
Much Wenlock B.C.
Newcastle (C.I.H.A.)
Nuneaton B.C.
Nuneaton (C.I.H.A.)
Rugby B.C.
Rugby R.D.C.
Shrewsbury B.C.
Stafford B.C.
Walsall B.C.
Warwick B.C.
Wellington U.D.C.

Houses or 2-storey flats	3- and 6- storey flats
294	
322	72
1,503	534
354	
58	
1,710	771
50	
304	
254	48
277	48
220	
198	
275	
220	
137	
238	
150	
316	
100	
198	
102	
7,280	1,473

MANCHESTER AREA

Accrington B.C.
Ashton-under-Lyne B.C.
Bacup B.C.
Bootle B.C.
Bradford City Council
Burnley B.C.
Dukinfield U.D.C.
Eccles B.C.
Failsworth U.D.C.
Fitzwilliam (C.I.H.A.)
Grimethorpe (C.I.H.A.)
Havercroft (C.I.H.A.)
Huddersfield B.C.
Ilkley U.D.C.
Kippax (C.I.H.A.)
Leeds City Council
Manchester City Council
Nelson B.C.
Oldham B.C.
Padgate (Air Ministry)
Pontefract (C.I.H.A.)
Prescott U.D.C.
Rotherham (C.I.H.A.)
St Helens B.C.
St Helens (C.I.H.A.)
South Kirby (C.I.H.A.)
Southport B.C.
Stockport B.C.
Tyldesley U.D.C.
Upton (C.I.H.A.)
Widnes B.C.

Houses or 2-storey flats	3- and 6- storey flats
414	96
192	
236	
412	
232	
110	
160	
96	
142	
568	
100	
140	
118	
436	
	264
308	318
50	
620	
76	
345	
288	
444	
100	
608	
270	
50	
276	
132	
100	
100	
7,123	678

NEWCASTLE AREA

Berwick B.C.
Billingham U.D.C.
Blyth B.C.
Dishforth (Air Ministry)
Gateshead C.B.C.
Harrogate B.C.
Newcastle C.B.C.
Peterlee Dev. Corporation
Scarborough B.C.
South Shields C.B.C.
Washington U.D.C.

Houses or 2-storey flats	3- and 6- storey flats
100	
208	
100	
80	
72	
104	
84	534
10	
50	
111	
94	
1,013	534

NOTTINGHAM AREA

Ashby R.D.C.
Carlton (C.I.H.A.)
Corby Dev. Corporation
Corby U.D.C.
Derby B.C.
Loughborough B.C.
Mansfield B.C.
Newark B.C.
Nottingham City Council

Houses or 2-storey flats	3- and 6- storey flats
50	
72	
351	72
668	
1,156	78
100	
599	
578	
4,370	
4,370	

NOTTINGHAM AREA continued

Scunthorpe B.C.
Staveley U.D.C.
Stonebroom (C.I.H.A.)
Sutton-in-Ashfield U.D.C.
Upwood (Air Ministry)
Worksop (C.I.H.A.)

SCOTLAND

Aberdeen (S.S.H.A.)
Dumbarton (S.S.H.A.)
Dumbries Burgh
Dundee Corporation
Edinburgh Corporation
Glasgow Corporation
Glasgow (S.S.H.A.)
Greenock (S.S.H.A.)
Kirkcaldy T.C.
Livingston Stn. (S.S.H.A.)
Motherwell Burgh
Musselburgh Burgh
Musselburgh (S.S.H.A.)
Perth Burgh
Renfrew C.C.
Stoneyburn (S.S.H.A.)

SOUTHERN COUNTIES

Alton (Hants) R.D.C.
Aylesbury (Bucks) B.C.
Barnwood (Glos) (A.M.)
Basingstoke (Hants) H.A.
Bishop's Stortford (Herts) U.D.C.
Cheltenham (Glos) B.C.
Cowes (I.O.W.) H.A.
Crawley Dev. Corpn.
Esher (Surrey) U.D.C.
Farnborough (Hants) U.D.C.
Harlow (Essex) Dev. Corpn.
Hemel Hempstead (Herts) Dev. Corpn.
Heston (Middx) (M.O.W.)
High Wycombe (Bucks) B.C.
Hullavington (Wilts) (A.M.)
Ilford (Essex) B.C.
Lulworth (Dorset) (War Office)
Portsmouth (Hants) City Council
Slough (Bucks) B.C.
Southampton (Hants) C.B.C.
Stevenage Dev. Corpn.
Watchet (Somerset) (A.M.)
Watford (Herts) B.C.
Wembley (Middx) B.C.
West Drayton (Middx) (A.M.)
Winterbourne (Wilts) (M.O.W.)
Wycombe (Bucks) R.D.C.
Yeovil (Somerset) (War Office)

WALES

Abergavenny B.C.
Bedwellty (C.I.H.A.)
Caerphilly (C.I.H.A.)
Cardiff City Council
Carmarthen B.C.
Chepstow U.D.C.
Cwmbran D.C.
Fishguard U.D.C.
Gelli-Groes (C.I.H.A.)
Glyncorwg U.D.C.
Haverfordwest R.D.C.
Hereford C.C.
Llantrisant R.D.C.
Llwyn-iago (C.I.H.A.)
Merthyr B.C.
Newport C.B.C.
Penarth U.D.C.
Penlline (C.I.H.A.)
Penybont R.D.C.
Port Talbot B.C.
Swansea C.B.C.
Trethomas (C.I.H.A.)

Houses or 2-storey flats	3- and 6- storey flats
454	162
418	
202	
104	
44	
464	
9,630	312
1,499	1,440
1,499	1,440
186	
148	
100	
28	
122	32
1,144	306
50	
150	
126	
1,010	96
320	
198	
38	
100	
94	
100	144
37	
420	
440	78
138	
150	546
76	
114	
180	
46	
42	
400	
72	
6,029	1,202
4,992	364

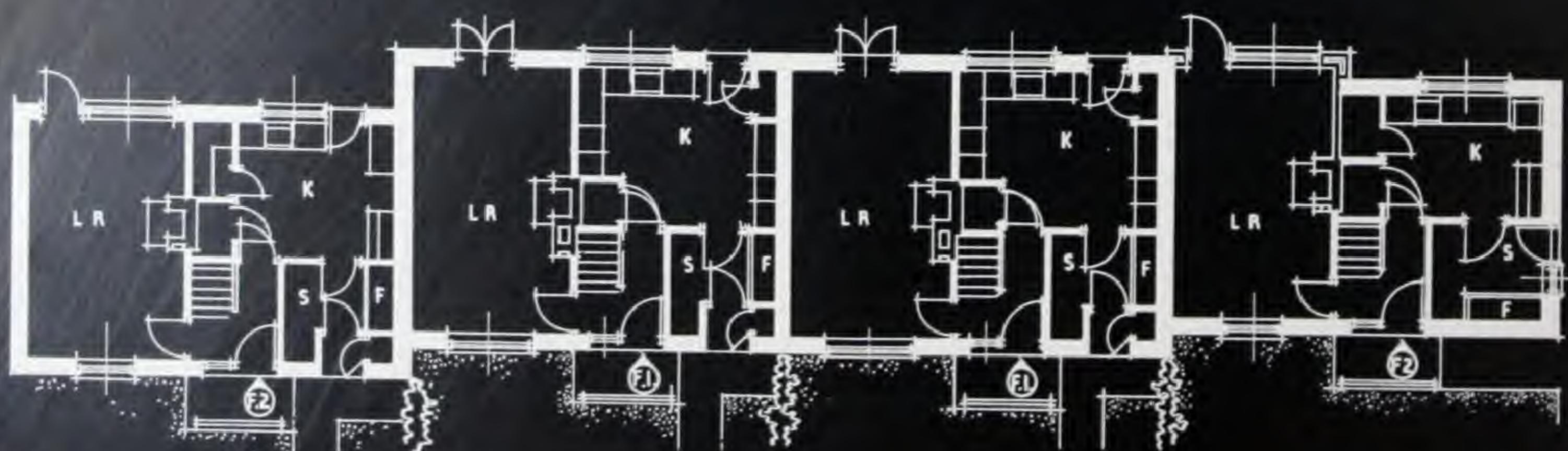
GRAND TOTAL 1952: 43,569

**REDUCED
AREA
HOUSES**

DEMONSTRATION HOUSES



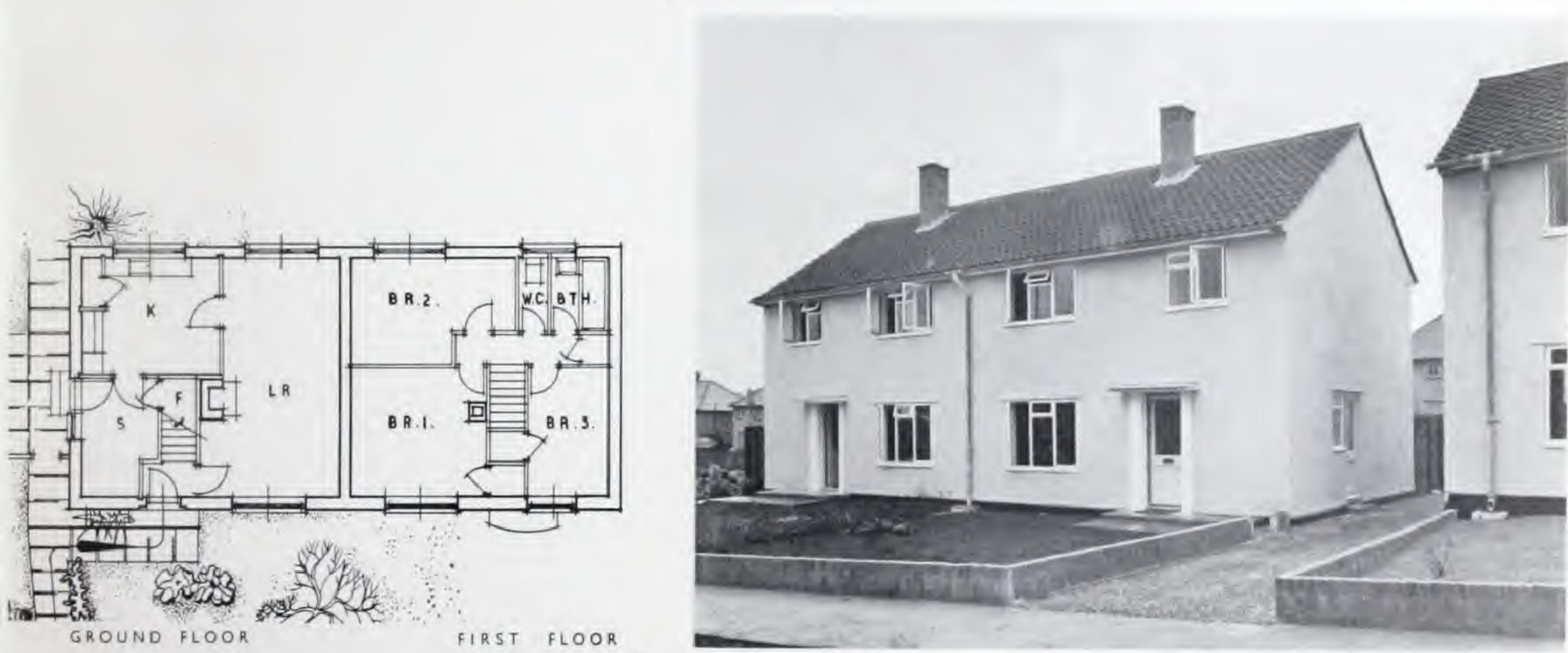
Early in 1952 the plans for a number of reduced area houses that have become known as 'People's Houses' were issued by the Ministry of Housing and Local Government. The immediate response of this Company was to build some of these houses at Eastcote, Coventry and Stockport, in order to demonstrate to local authorities the versatility of the No-fines method, and to give them some idea of the general planning and appearance of the new-type house. In the accompanying photographs may be seen the six houses built at Eastcote in only seven weeks, demonstrating two of the Ministry Plans, F1 and F2; also a reduced-area semi-detached house designed in anticipation of their need, by Wimpey architects. Opposite may be seen the houses, also built in seven weeks for the Coventry City Council on the Tile Hill Estate at Coventry.



GROUND FLOOR



At Coventry the 'open' type plan was demonstrated in two of these houses, and central heating was a feature of them



The six houses at Eastcote comprised the two semi-detached three-bedroom houses (see plan and photo above) and a terrace of four houses containing two two-bedroom houses with an area of 757 feet super and two three-bedroom houses with an area of 882 feet super. Each house has one main living-room with a dining kitchen, with storage space inside the house.





A



B

NO-FINES INTERIORS



The interior views are of the demonstration houses. A and B: Coventry; C to H: Eastcote, Middlesex. These houses were opened and local authorities and members of the general public were then invited to inspect them. Many interesting and informative observations resulted from these inspections

WHY REDUCED AREA HOUSES?

The Ministry of Housing and Local Government has taken up the cause of these

smaller houses because, while fully maintaining the present standards in respect of

room sizes recommended by the Dudley Committee, the over-all area of the house

has been reduced to allow more houses to be obtained from the available materials,

labour and money. Passage space has been reduced, storage space is internal, ceiling

heights are slightly lowered, and second lavatories are omitted. It was the view of this

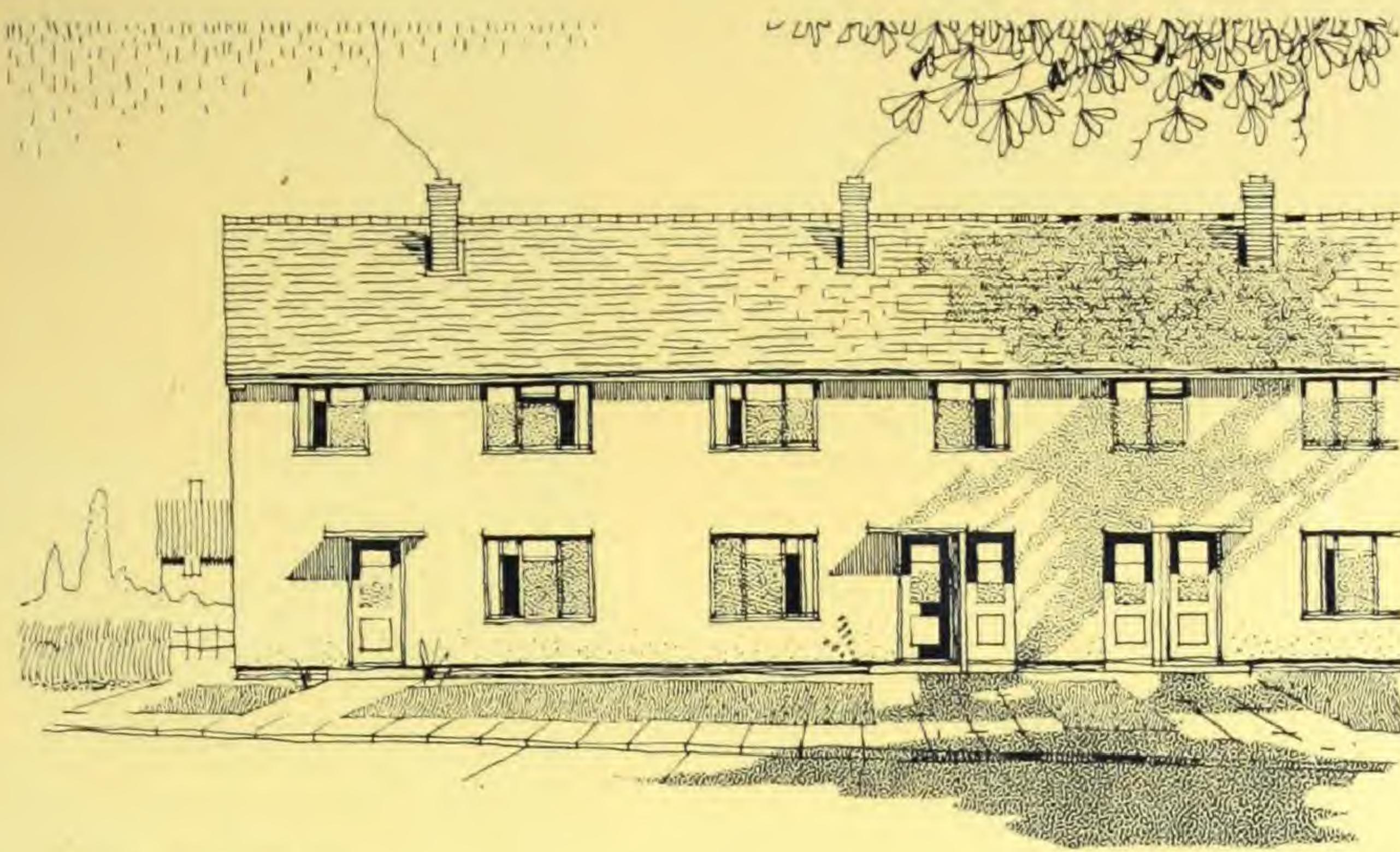
Company that many local authorities would want to take advantage of the considerable

saving brought about by the adoption of these plans, and it was to give them an oppor-

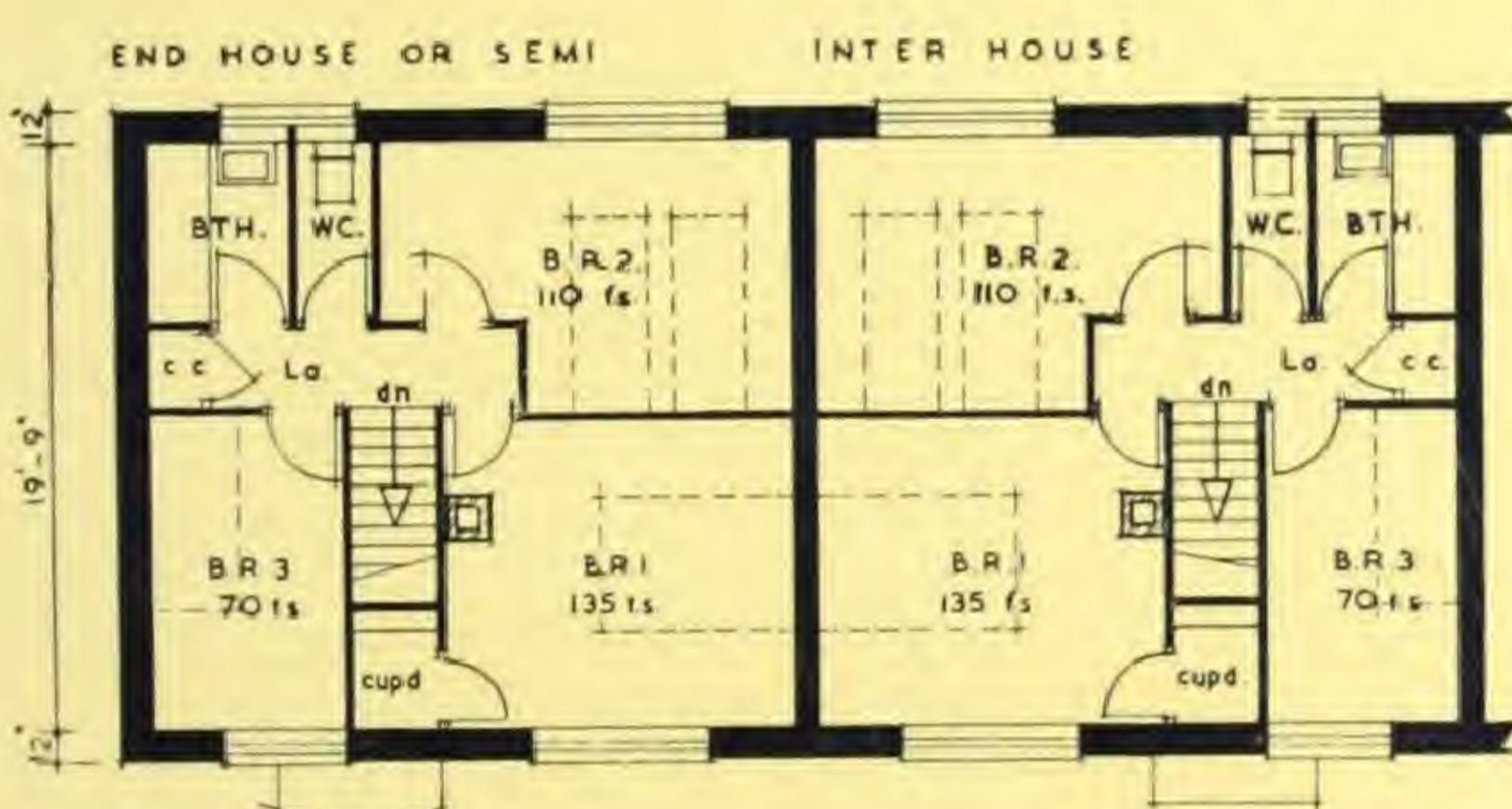
tunity of assessing the virtues of these new designs that our various demonstration

houses were built. In the following pages may be seen the various types of reduced-area

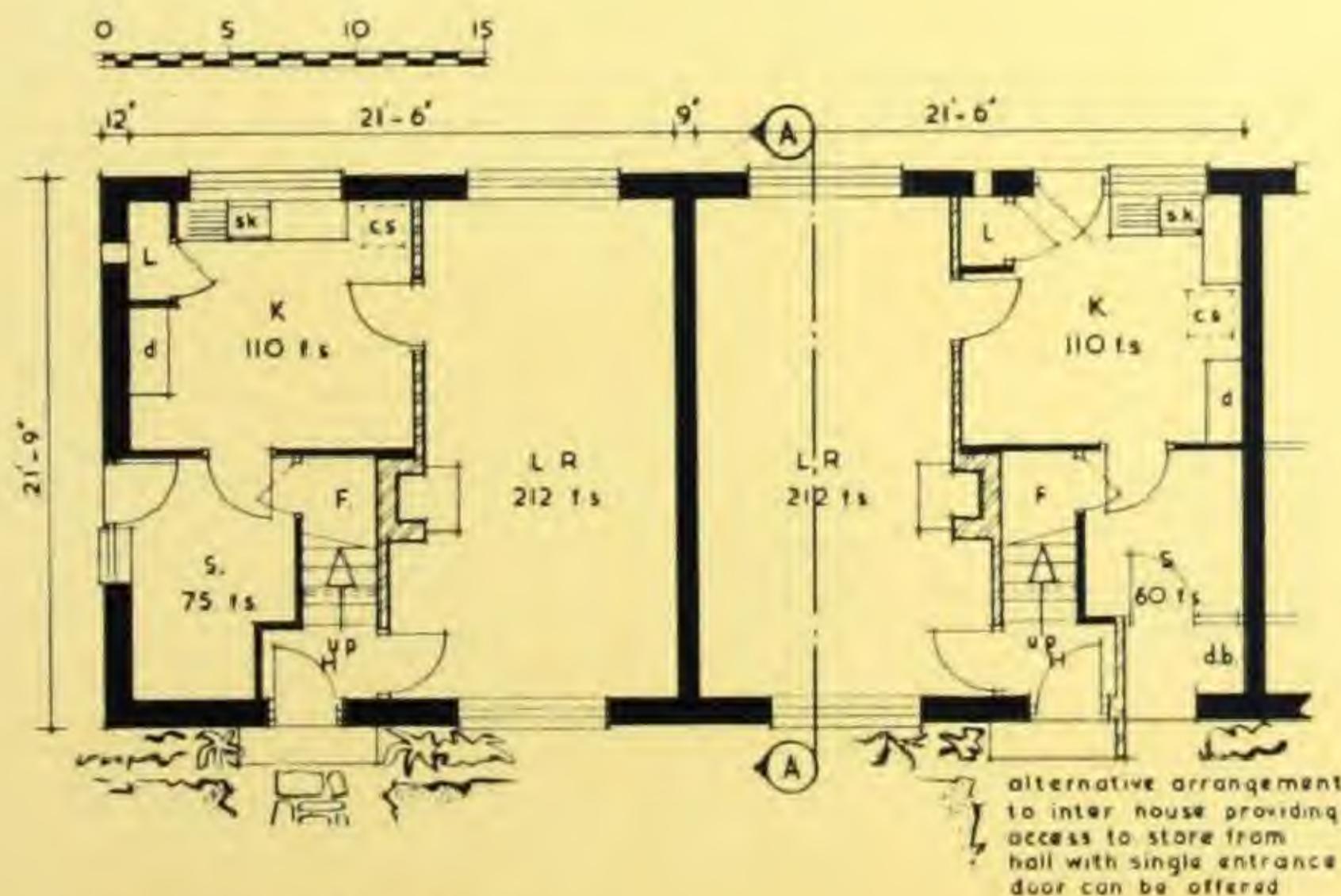
houses which we are building in our No-fines construction.



SKETCH ELEVATION



FIRST FLOOR PLAN



GROUND FLOOR PLAN

FLOOR AREAS

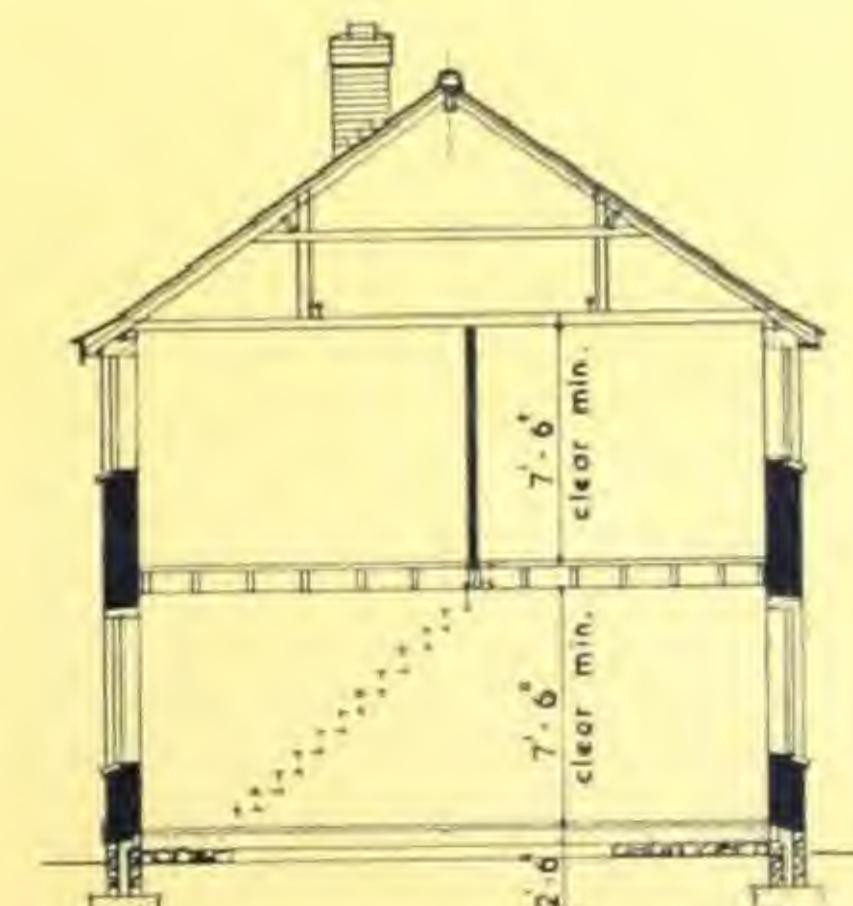
END HOUSE

Gross House Area	849
Store	75
Nett House Area	774
Aggregate Living Space	322 F.S.

INTER HOUSE

Gross House Area	849
Store	60
Nett House Area	789
Aggregate Living Space	322 F.S.

SECTION A - A



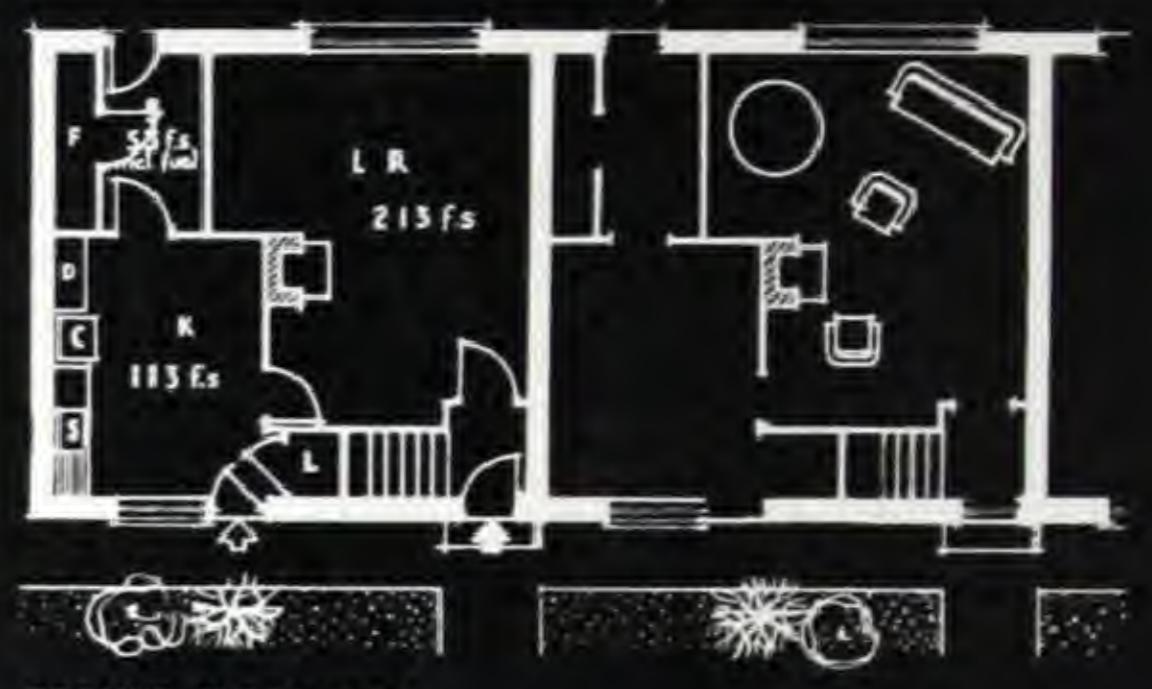
RP/70 THREE-BEDROOM TERRACE, UNIVERSAL ASPECT TYPE



TYPE RP 71 NORTH ASPECT TYPE WITH ACCESS AT REAR



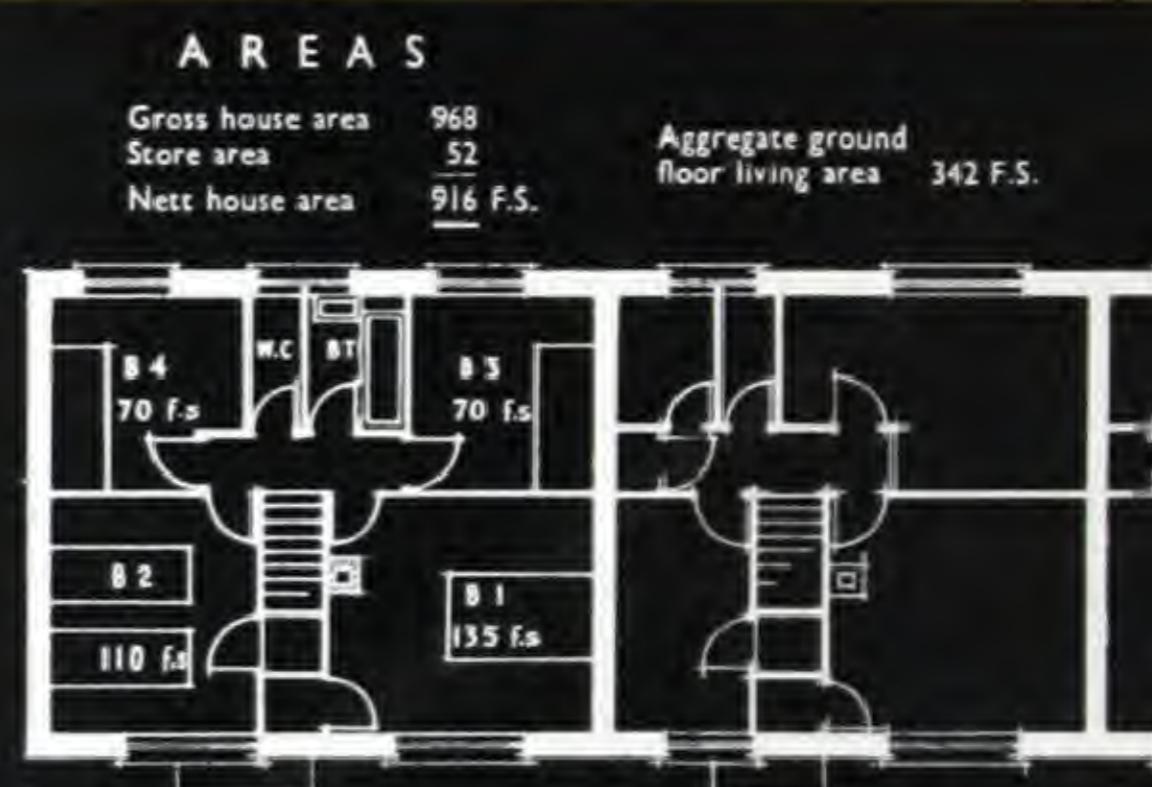
FIRST FLOOR PLAN



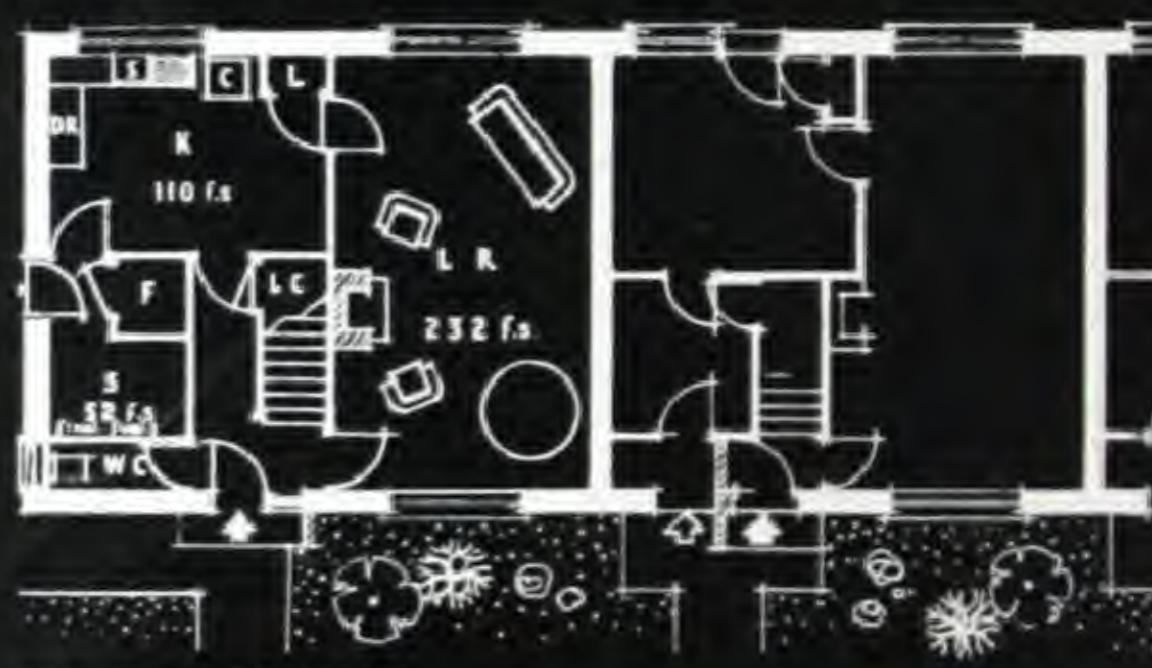
GROUND FLOOR PLAN



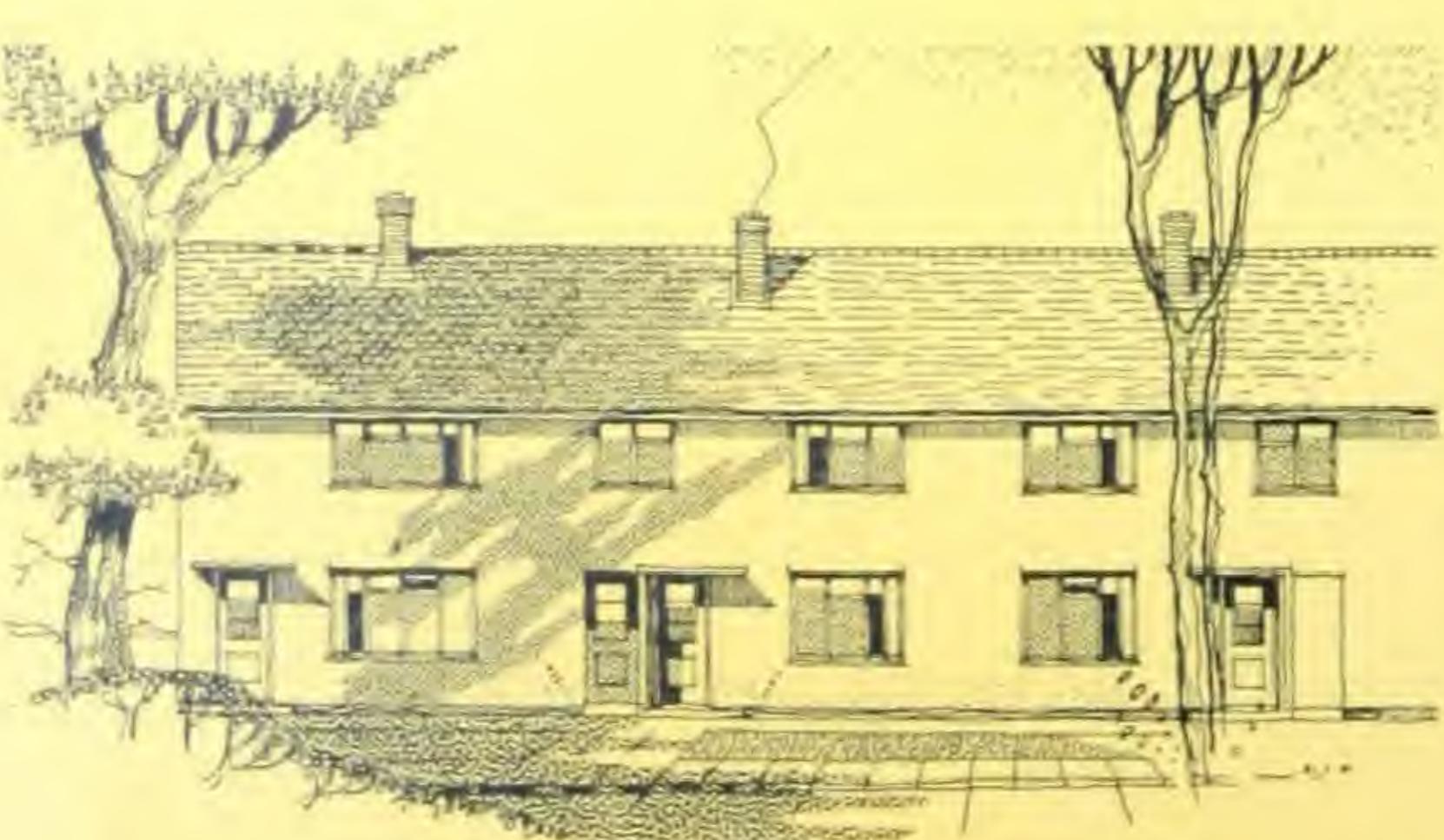
TYPE RP 72 FOUR-BEDROOM END HOUSE TO THREE-BEDROOM TERRACE



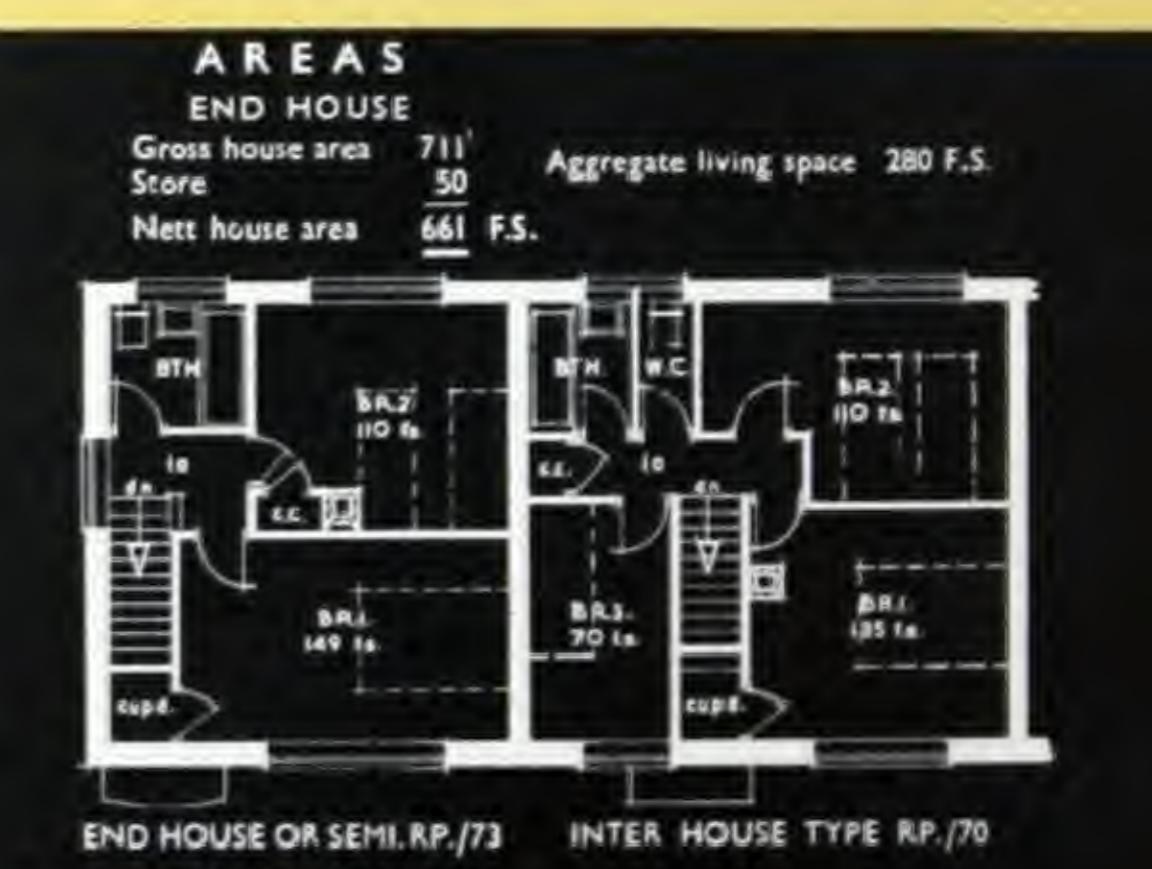
FIRST FLOOR PLAN



GROUND FLOOR PLAN



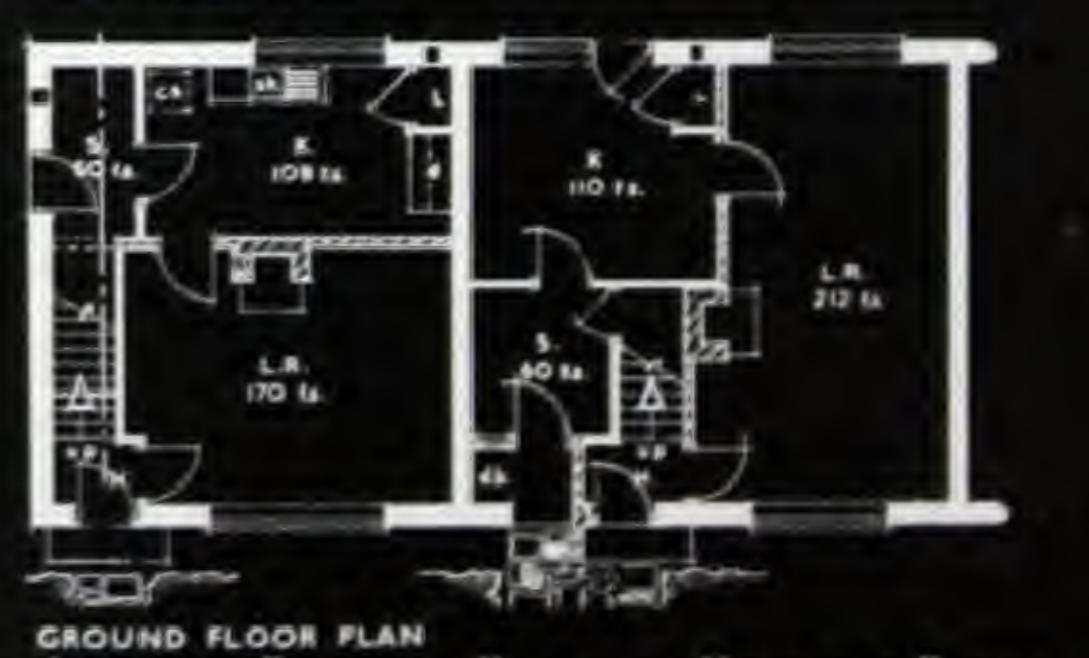
TYPE RP 73 TWO-BEDROOM END HOUSE TO THREE-BEDROOM TERRACE



END HOUSE OR SEMI. RP.73

INTER HOUSE TYPE RP.70

FIRST FLOOR PLAN



GROUND FLOOR PLAN

SCALE 0 10 20 30 40 FEET

AREAS

Gross house area 484
 Aggregate living area 225
 Ground floor 225 F.S.
 First floor 236 F.S.

Detached external stores for
 maisonettes sited as required.



FIRST FLOOR PLAN



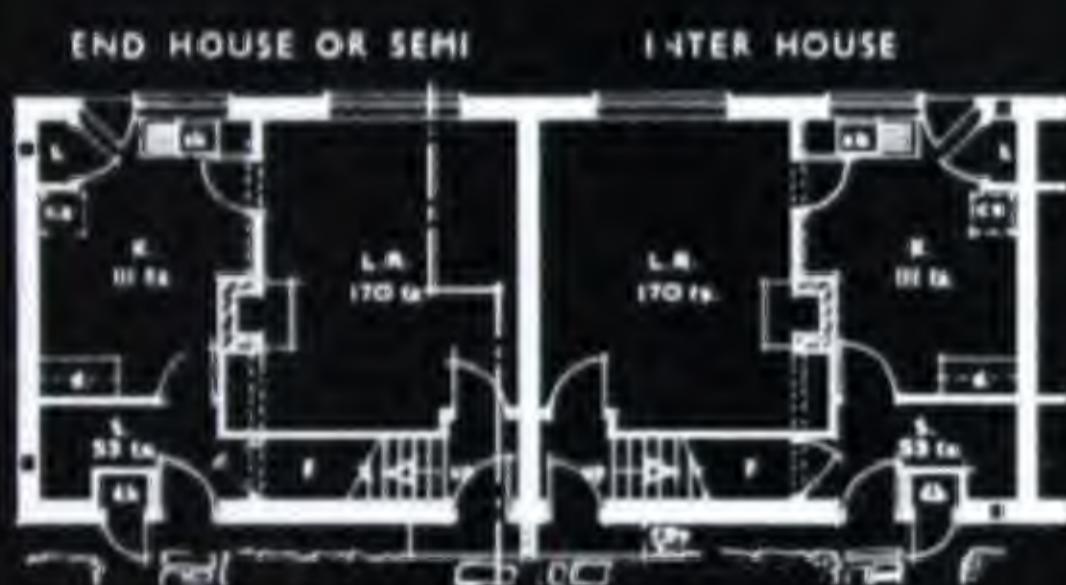
GROUND FLOOR PLAN

AREAS

END HOUSE	INTER HOUSE
Gross house area 731	Gross house area 731
Store 53	Store 53
Nett house area 678	Nett house area 678
Aggregate living space 281 F.S.	Aggregate living space 281 F.S.



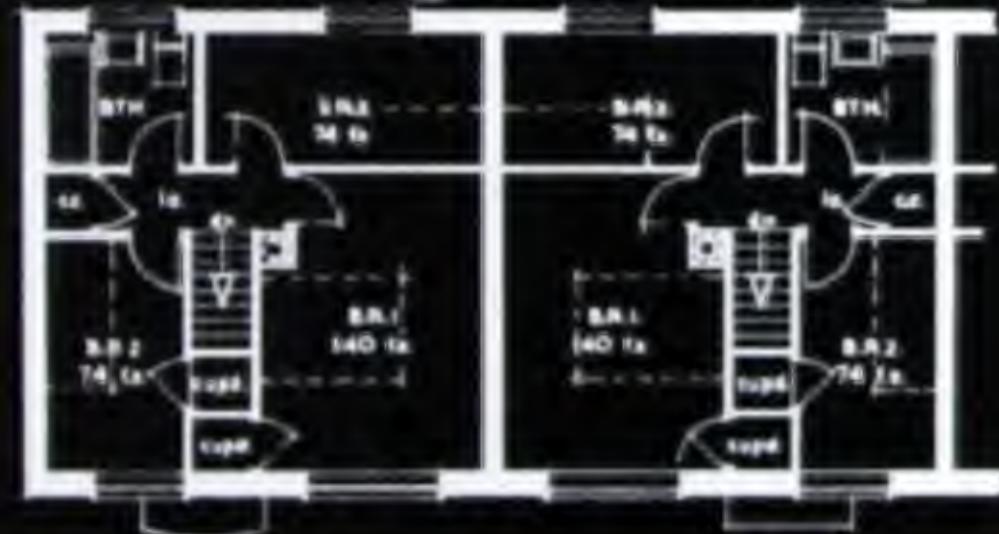
FIRST FLOOR PLAN



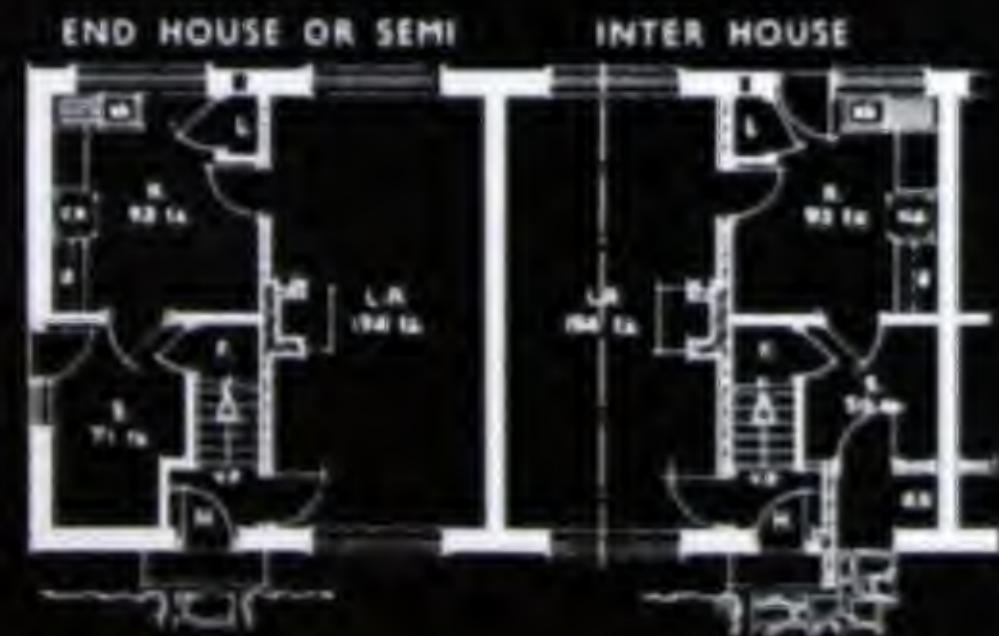
GROUND FLOOR PLAN

AREAS

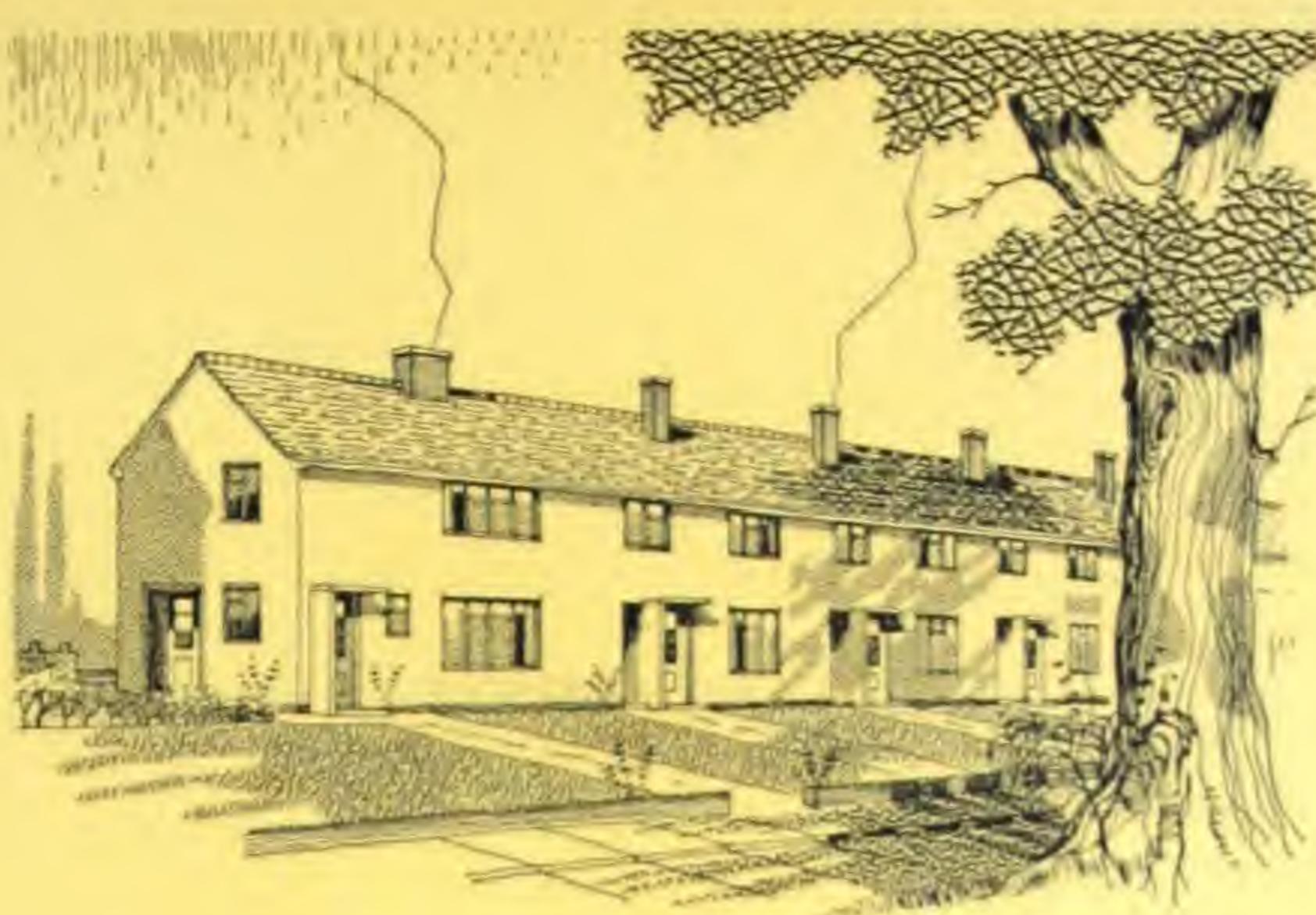
END HOUSE	INTER HOUSE
Gross house area 770	Gross house area 770
Store 71	Store 56
Nett house area 699	Nett house area 714
Aggregate living space 287 F.S.	Aggregate living space 287 F.S.



FIRST FLOOR PLAN



GROUND FLOOR PLAN



TYPE RP/74 ONE-BEDROOM MAISONETTES AT END OF THREE-BEDROOM TERRACE



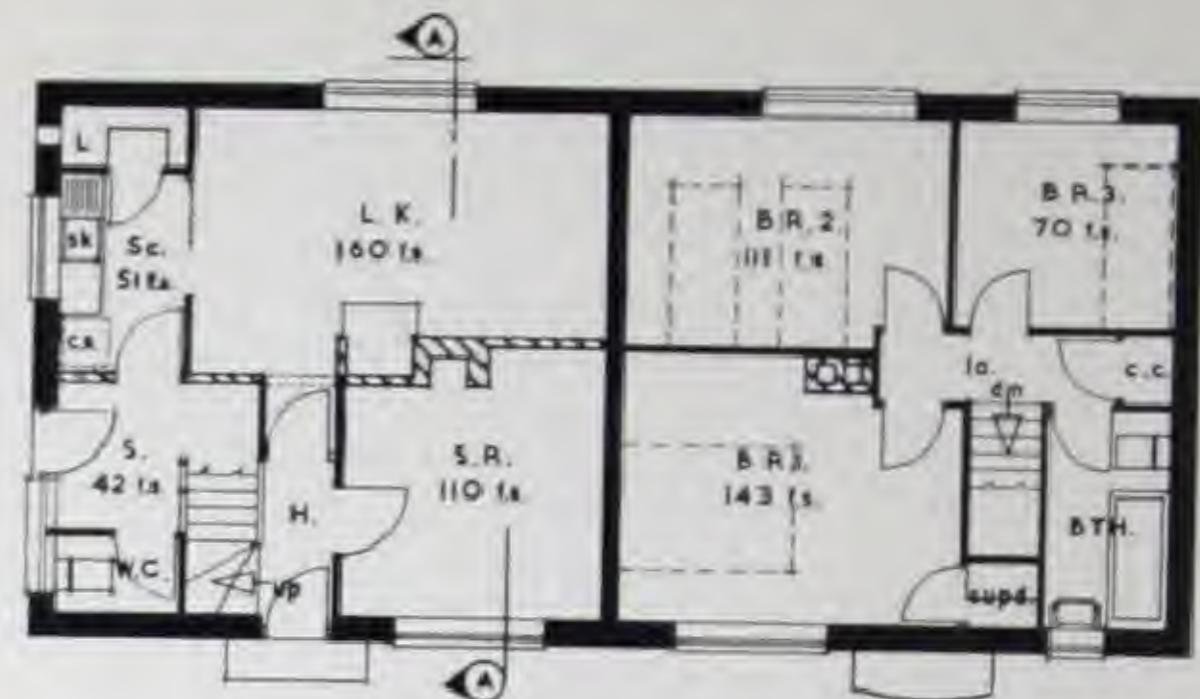
TYPE RP/75 TWO-BEDROOM TERRACE TYPE



TYPE RP/77 THREE-BEDROOM TERRACE TYPE — 4 PERSONS



SKETCH ELEVATION



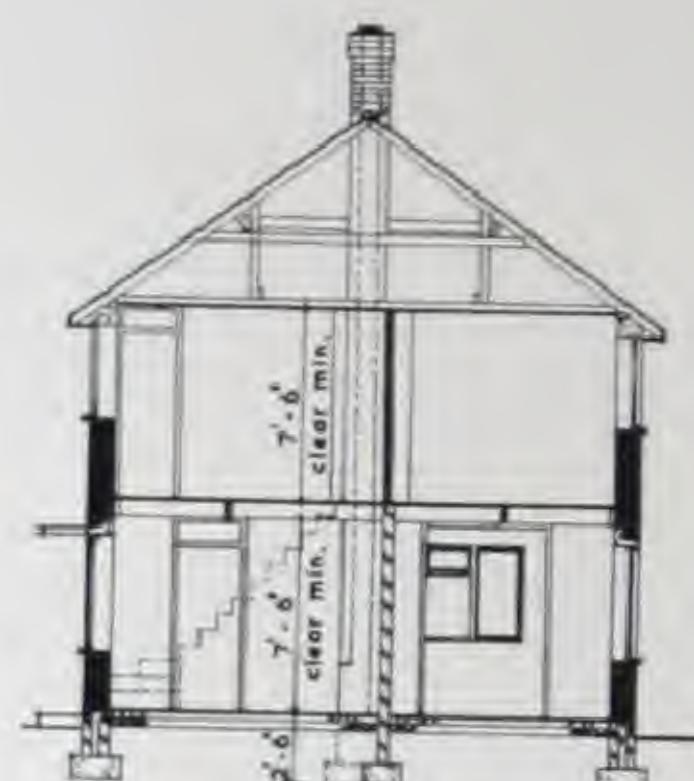
GROUND FLOOR

FIRST FLOOR

Fireplace offered in
Bedroom 1 if required.

FLOOR AREAS

GROSS HOUSE AREA	849
STORE	68
NETT HOUSE AREA	781
AGGREGATE LIVING SPACE	321 F.S.



SECTION A-A

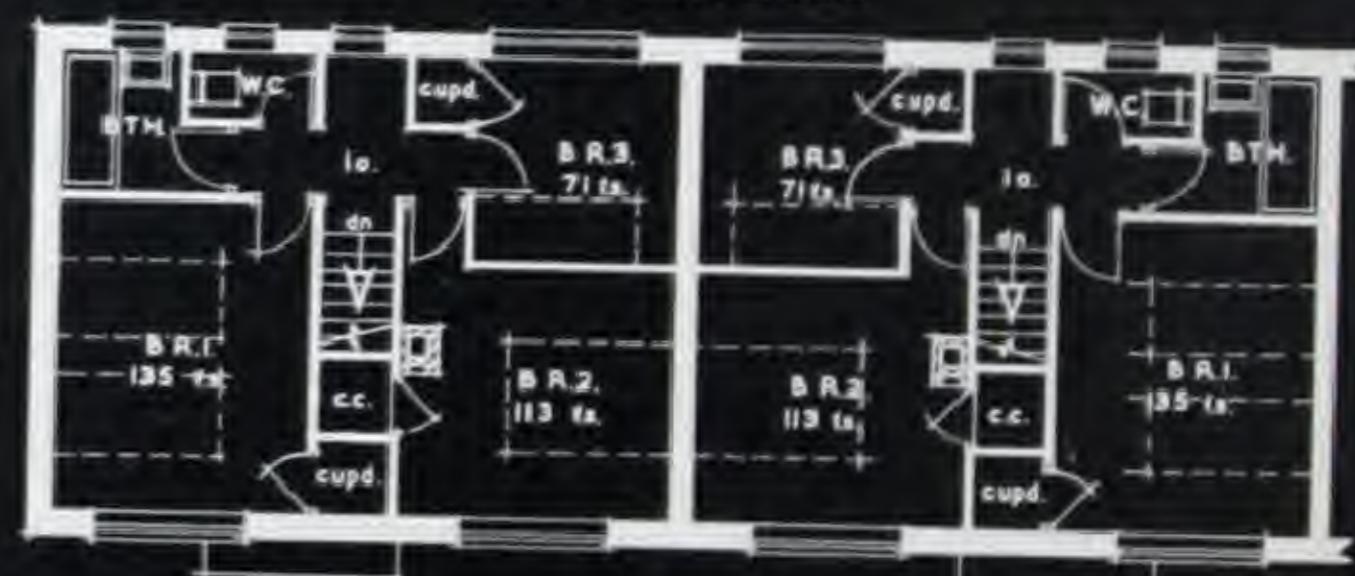
RP/80 THREE-BEDROOM TYPE WITH SITTING ROOM (SOLID FUEL COOKING RANGE)



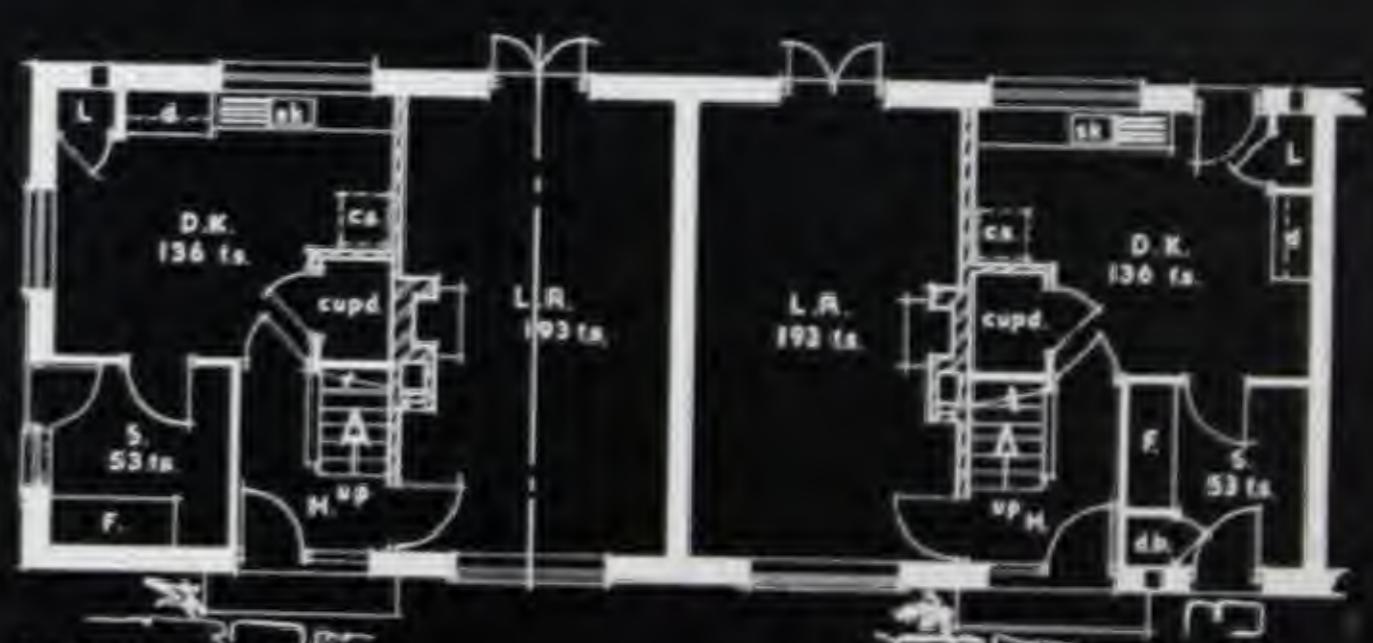
SKETCH ELEVATION

FLOOR AREAS	
END HOUSE	INTER HOUSE
GROSS HOUSE AREA	882
STORE	51
NETT HOUSE AREA	829
AGGREGATE LIVING SPACE	329 F.S.
GROSS HOUSE AREA	882
STORE	51
NETT HOUSE AREA	829
AGGREGATE LIVING SPACE	329 F.S.

alternative store arrangement
to inter house can be offered.



FIRST FLOOR PLAN



GROUND FLOOR PLAN

RP/F1 THREE BEDROOM TERRACE TYPE

(ADOPTED FROM "HOUSES 1952")

FLOOR AREAS	
END HOUSE	INTER HOUSE
GROSS HOUSE AREA	786
STORE	51
NETT HOUSE AREA	735
AGGREGATE LIVING SPACE	290 F.S.
GROSS HOUSE AREA	786
STORE	51
NETT HOUSE AREA	735
AGGREGATE LIVING SPACE	290 F.S.



FIRST FLOOR PLAN



GROUND FLOOR PLAN

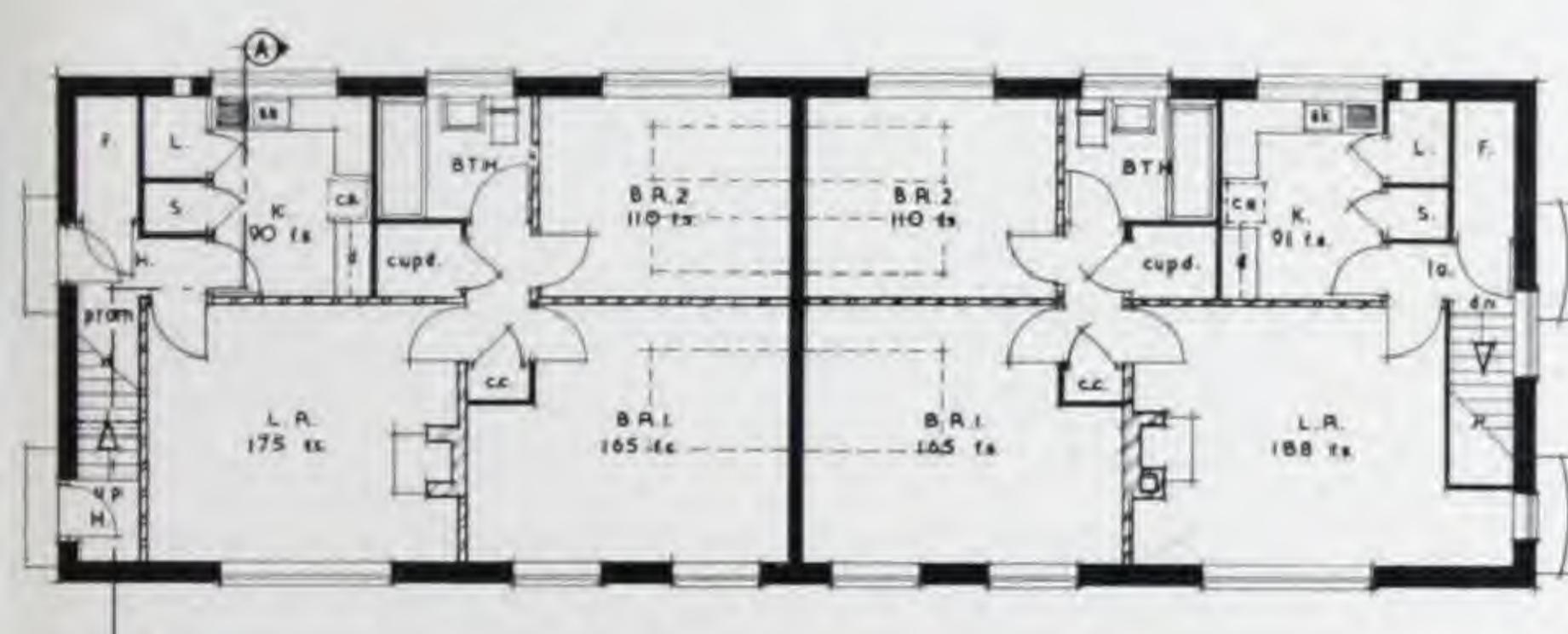


SKETCH ELEVATION

RP/F2 TWO BEDROOM TERRACE

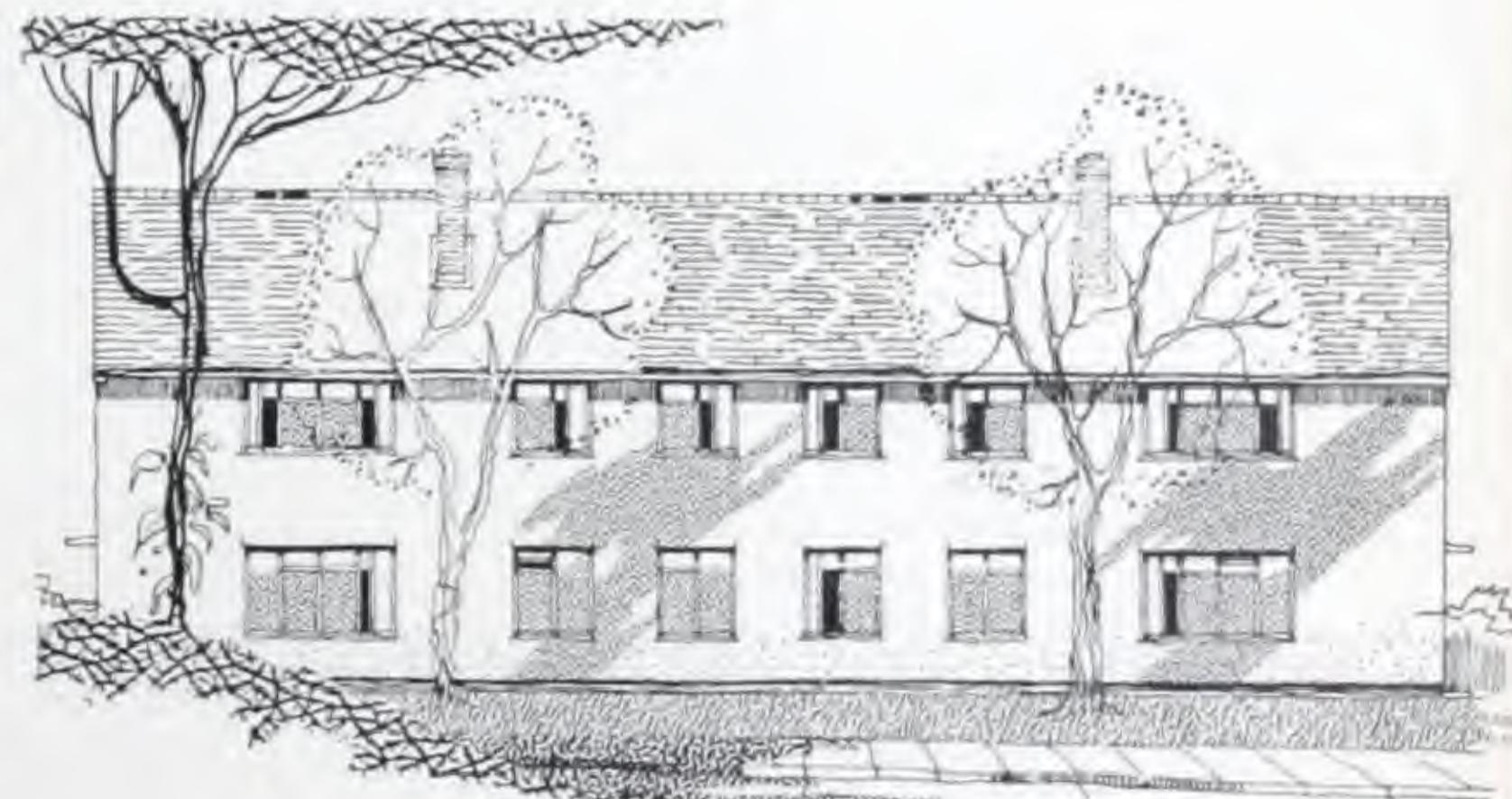
(ADOPTED FROM 'HOUSES 1952')

SCALE 0 10 20 30 40 FEET



GROUND FLOOR FLAT

FIRST FLOOR FLAT



SKETCH ELEVATION

FLOOR AREAS

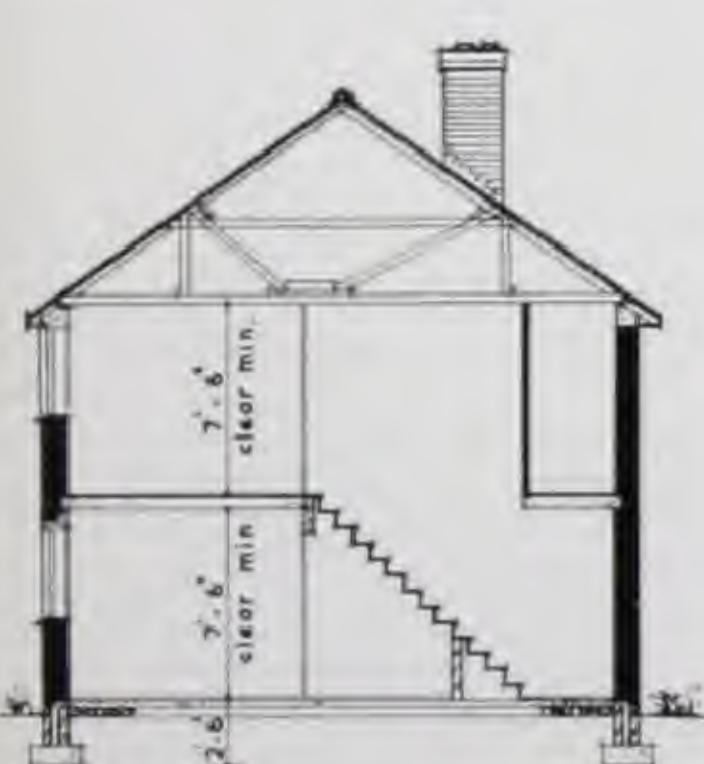
GROUND FLOOR

GROSS FLAT AREA (in. ext. S)	763
STORE (S & F.)	57
NETT FLAT AREA	706
AGGREGATE LIVING SPACE	265 F.S.

FIRST FLOOR

GROSS FLAT AREA (in. ext. S)	763
STORE (S & F.)	58
NETT FLAT AREA	705
AGGREGATE LIVING SPACE	279 F.S.

SECTION A-A

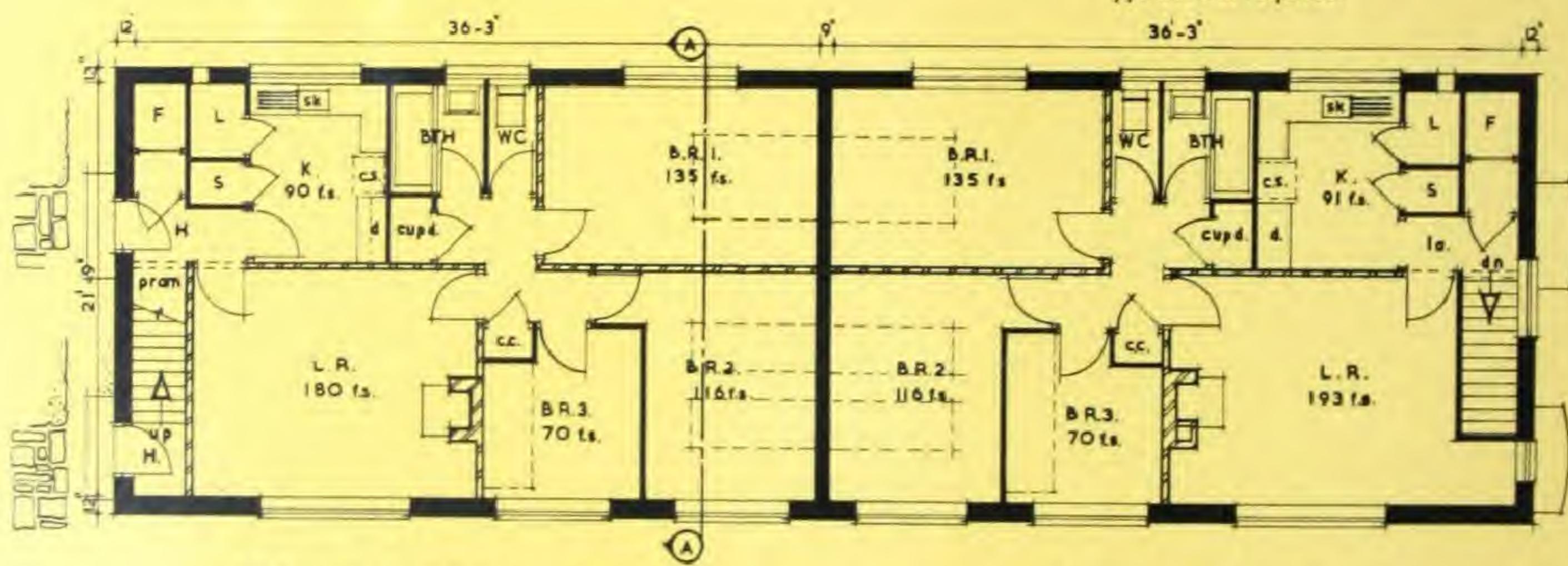


RP/78 TWO-STORY FLATS WITH TWO BEDROOMS



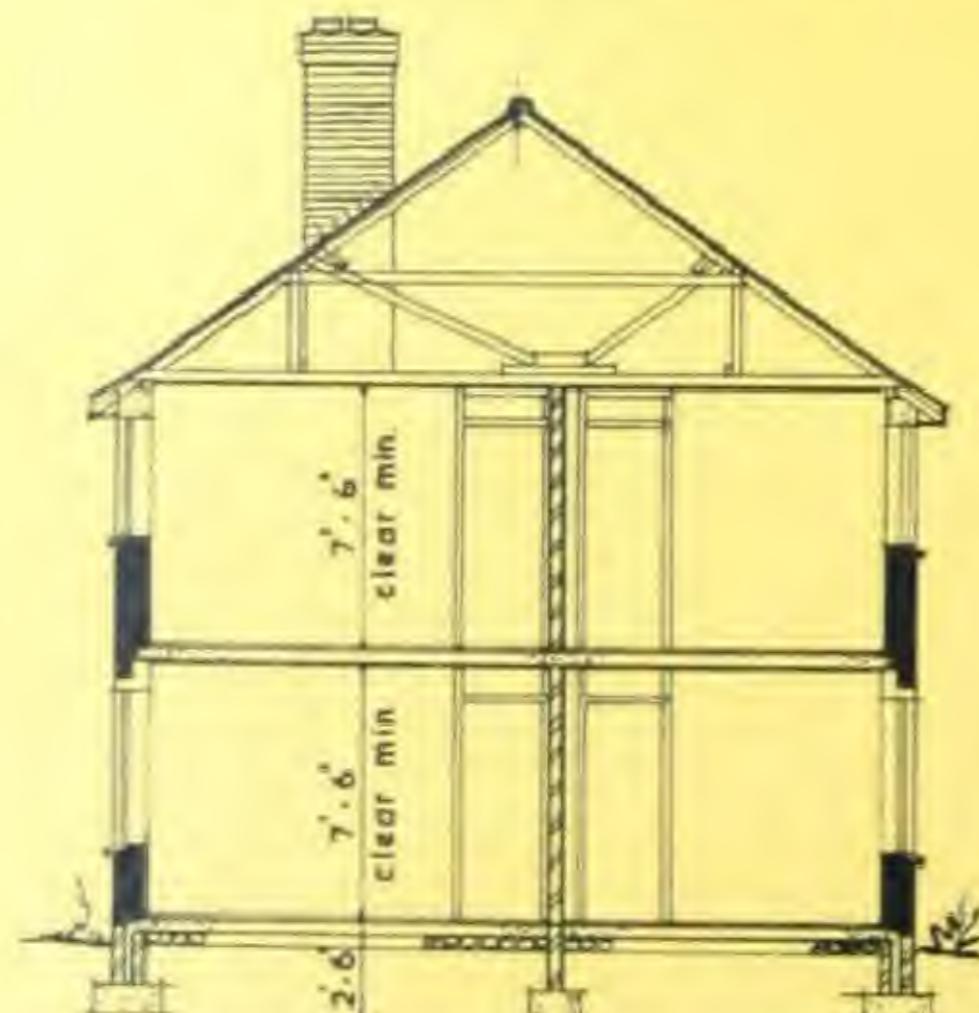
SKETCH ELEVATION

External store provided with this type sited as required.



GROUND FLOOR FLAT

FIRST FLOOR FLAT



SECTION A-A

SCALE 0 10 20 30 40 FEET

FLOOR AREAS

GROUND FLOOR

Gross flat area (inc. ext. S.)	828
Store (S & F)	57
Nett flat area	771
Aggregate living space	270 f.s.

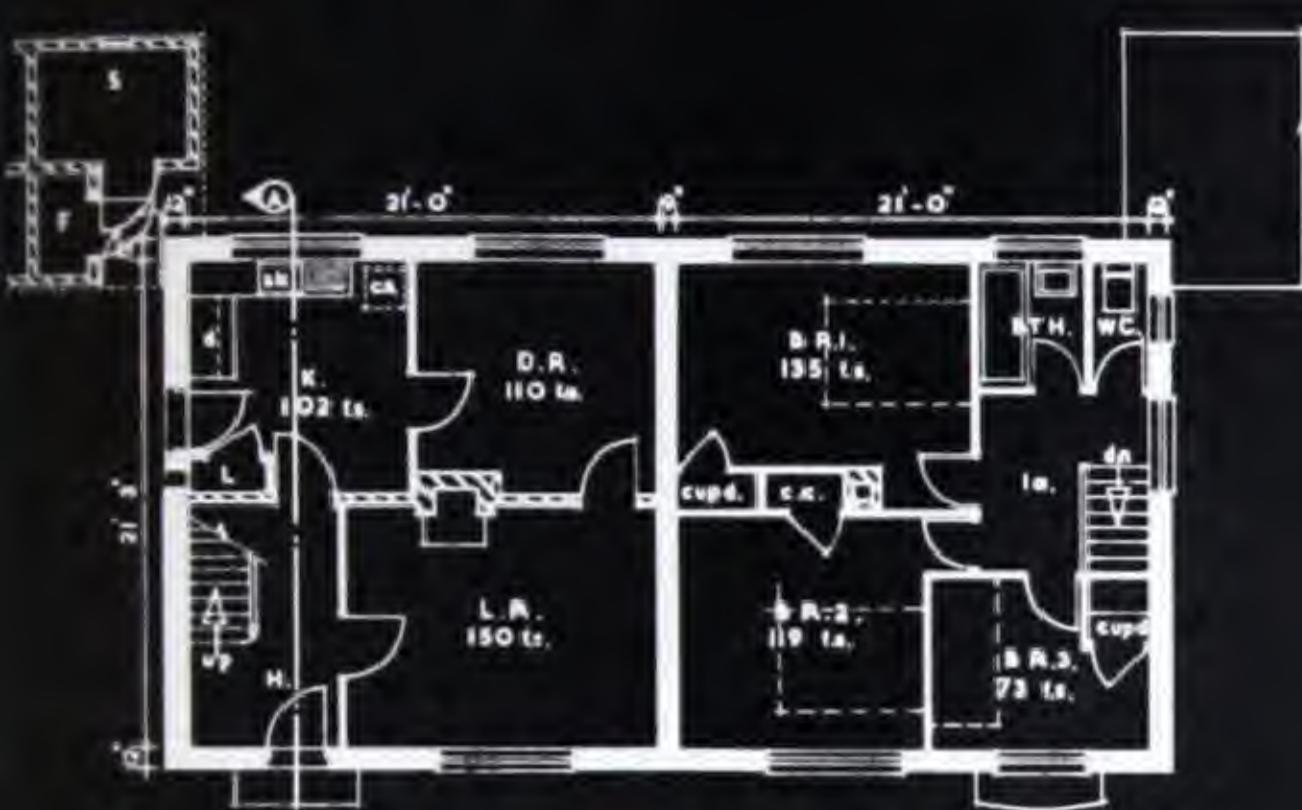
FIRST FLOOR

Gross flat area (inc. ext. S.)	828
Store (S & F)	58
Nett flat area	770
Aggregate living space	284 f.s.

TYPE RP/79 TWO-STORY FLATS WITH THREE BEDROOMS

AREAS

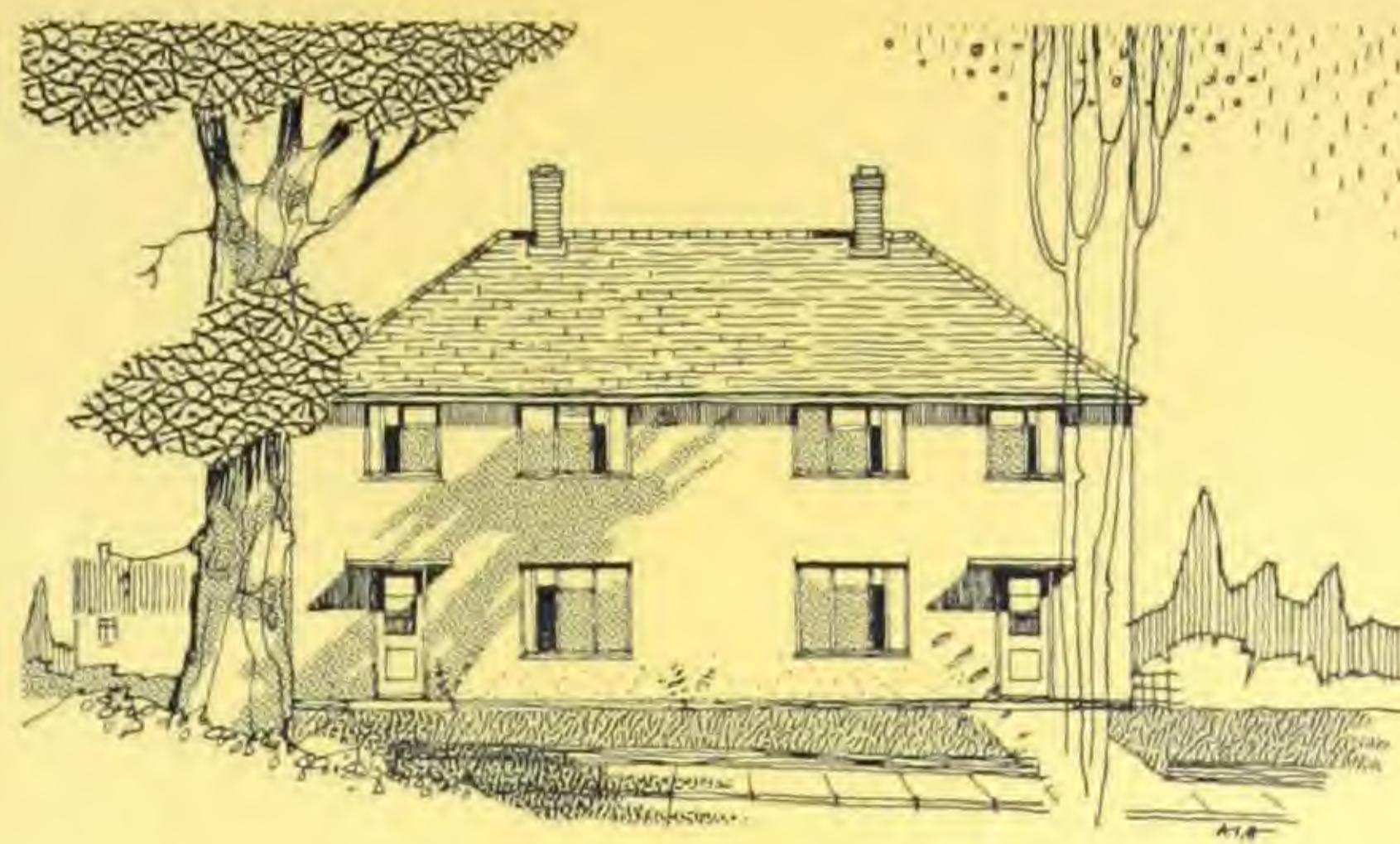
Gross house area (inc. O/B's. & C.W.)	961
Out/Buildings & C. Way	68
Nett house area	893
Aggregate living space	362 f.s.



GROUND FLOOR PLAN

FIRST FLOOR PLAN

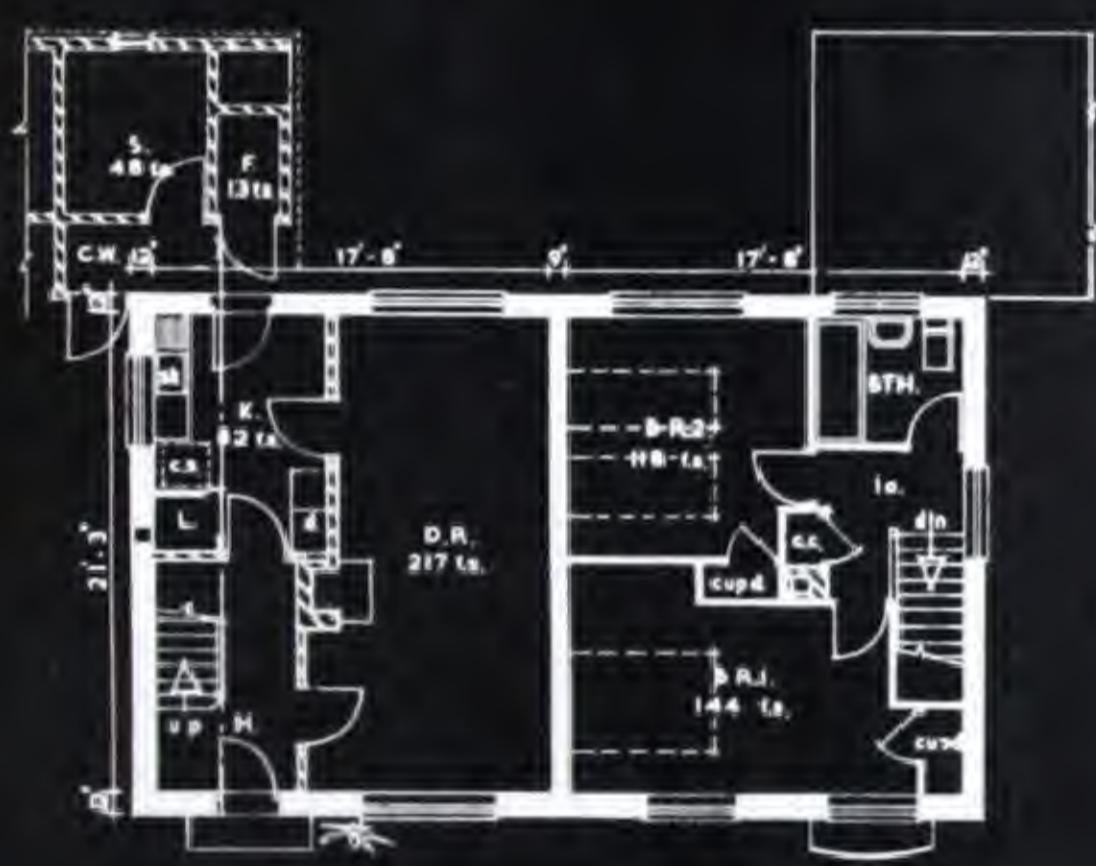
SCALE 0 10 20 30 40 FEET



TYPE RP/41 SEMI-DETACHED WITH THREE BEDROOMS

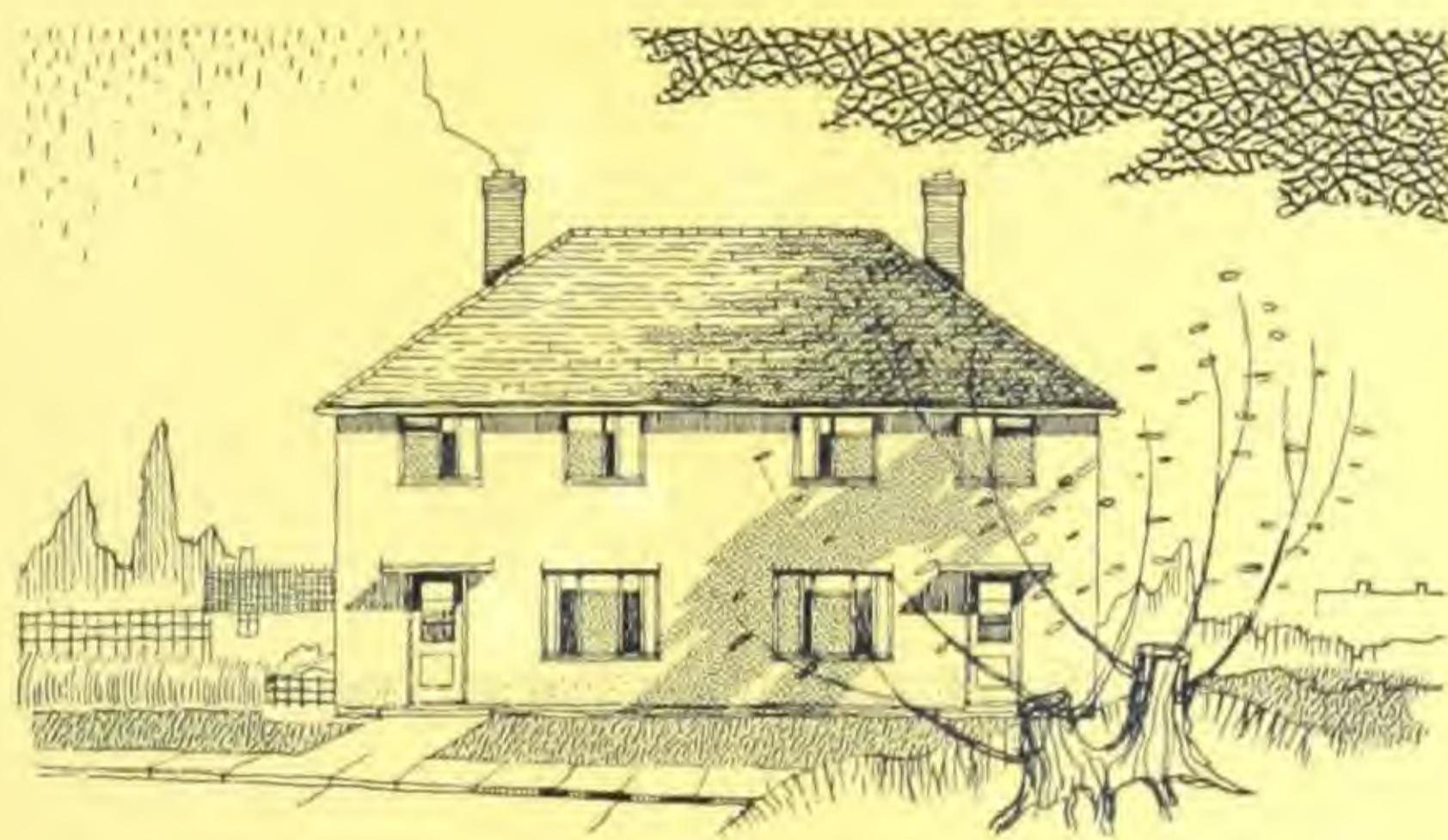
AREAS

Gross house area (inc. O/B's. & C.W.)	855
Out/Buildings & C.W.	104
Nett house area	751
Aggregate living space	299 f.s.



GROUND FLOOR PLAN

FIRST FLOOR PLAN



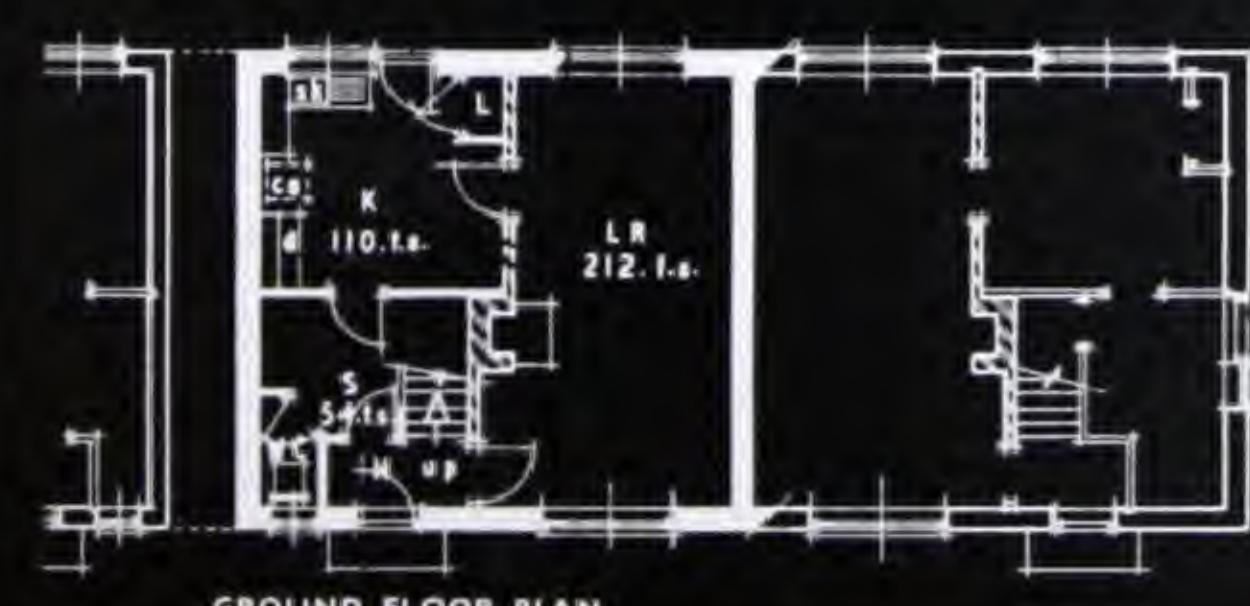
TYPE RP/62 SEMI-DETACHED WITH TWO BEDROOMS

AREAS

Gross house area	940
Store	66
Nett house area	874
Aggregate living space	322 f.s.



FIRST FLOOR PLAN

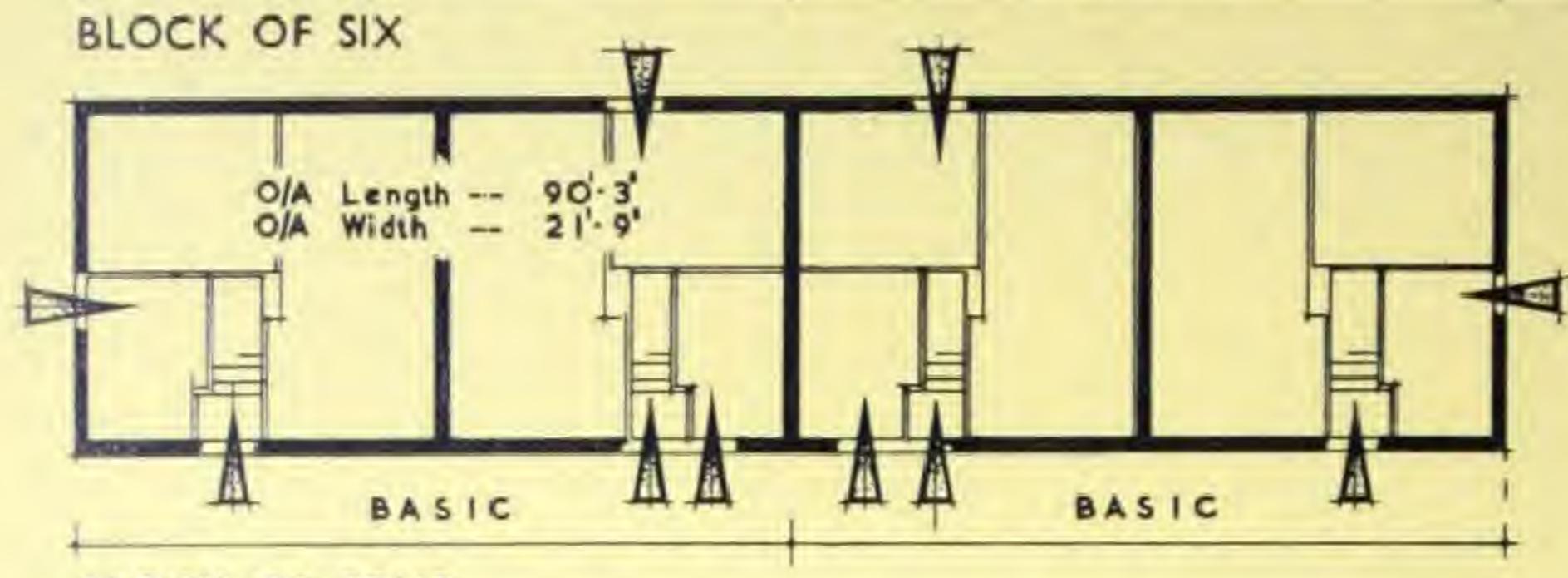
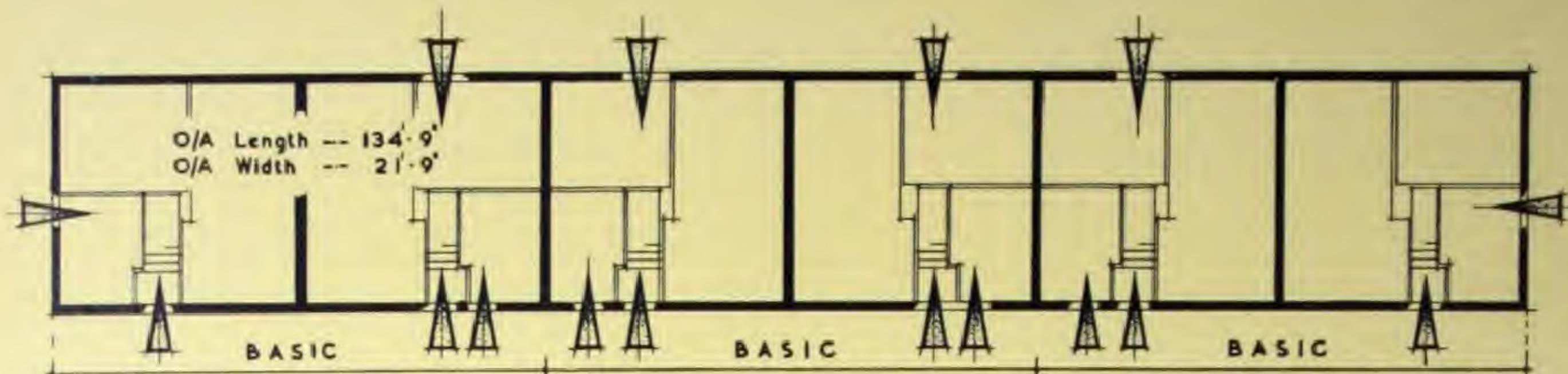


GROUND FLOOR PLAN

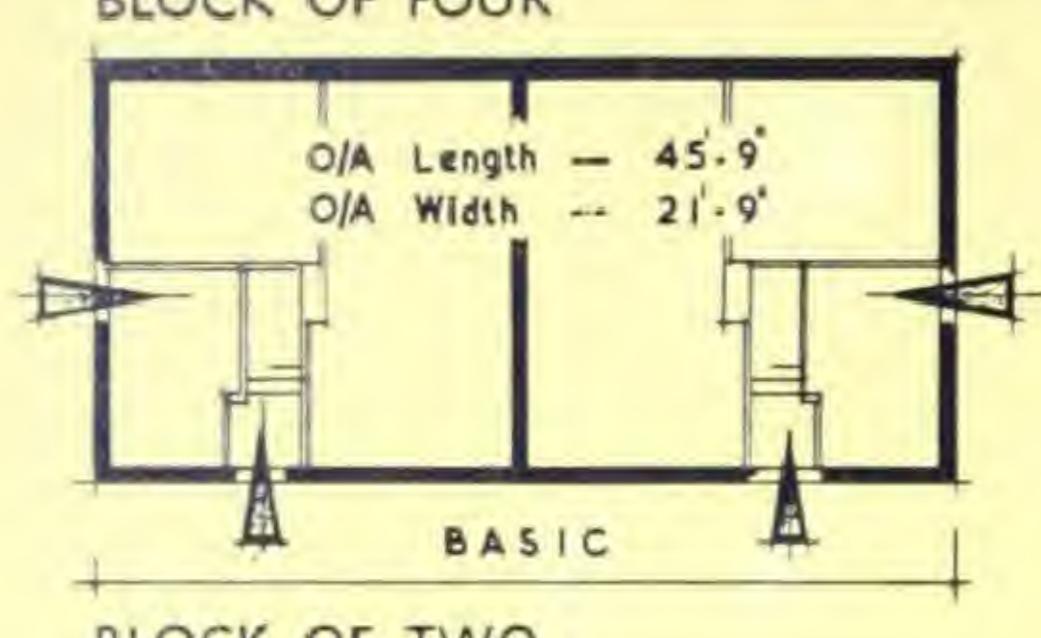


TYPE RP/110 FOUR-BEDROOM INTER HOUSE
(incorporated in RP/70 Terrace with Passage)

D I A G R A M S



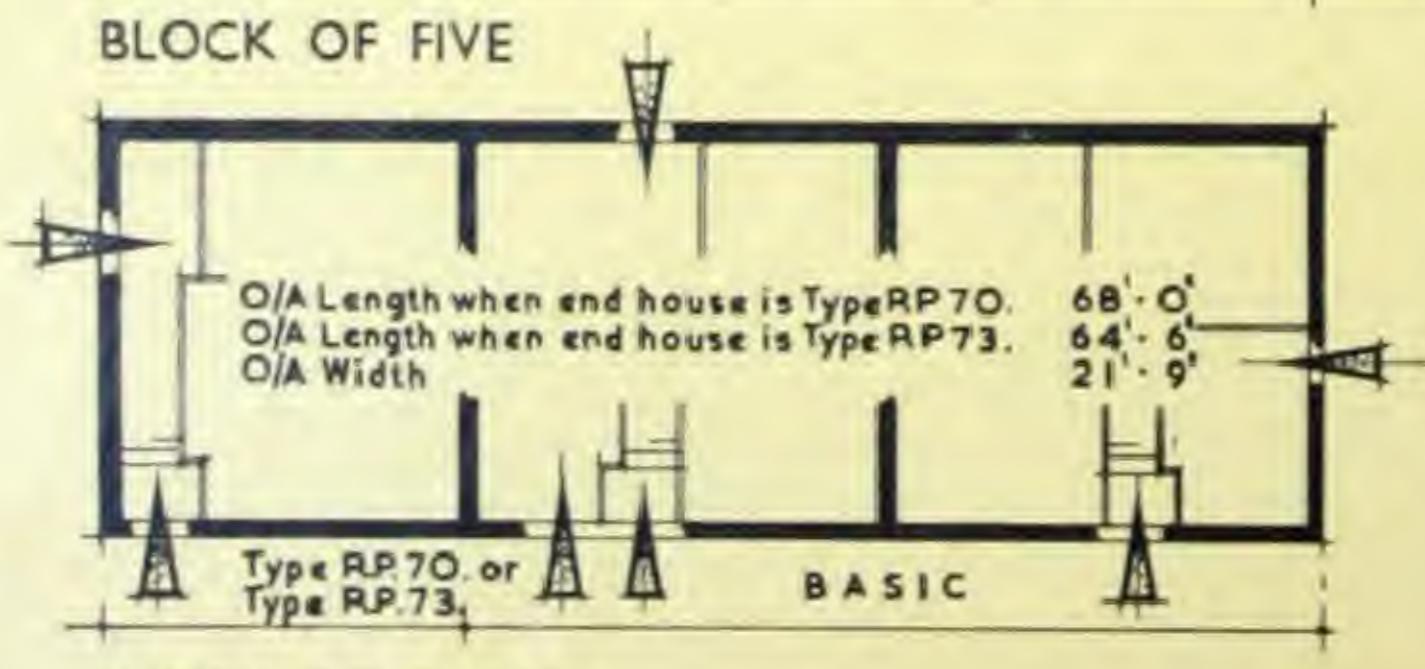
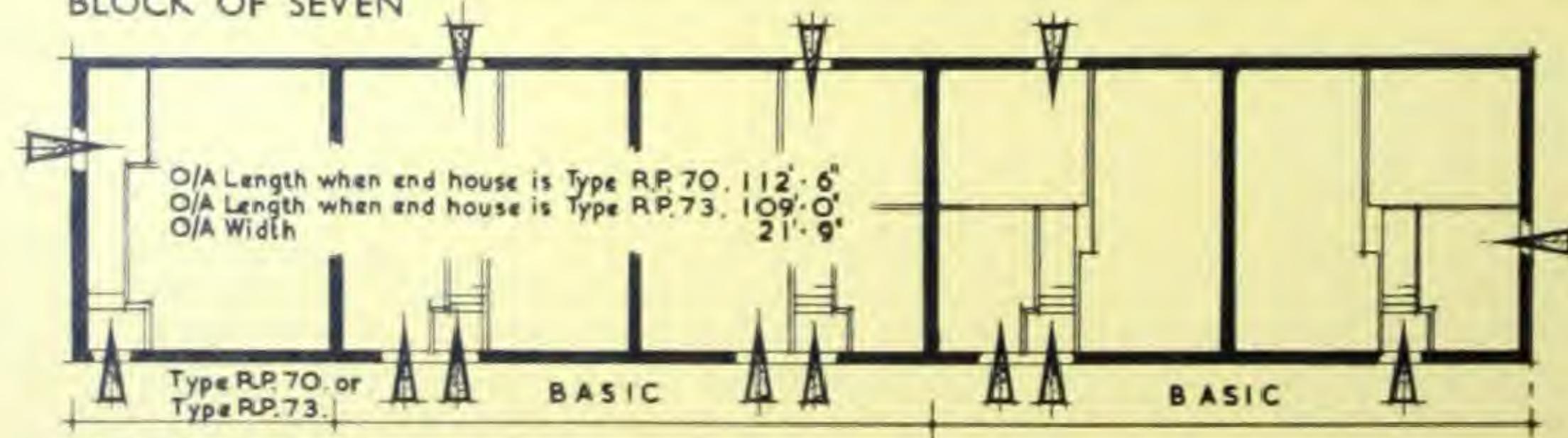
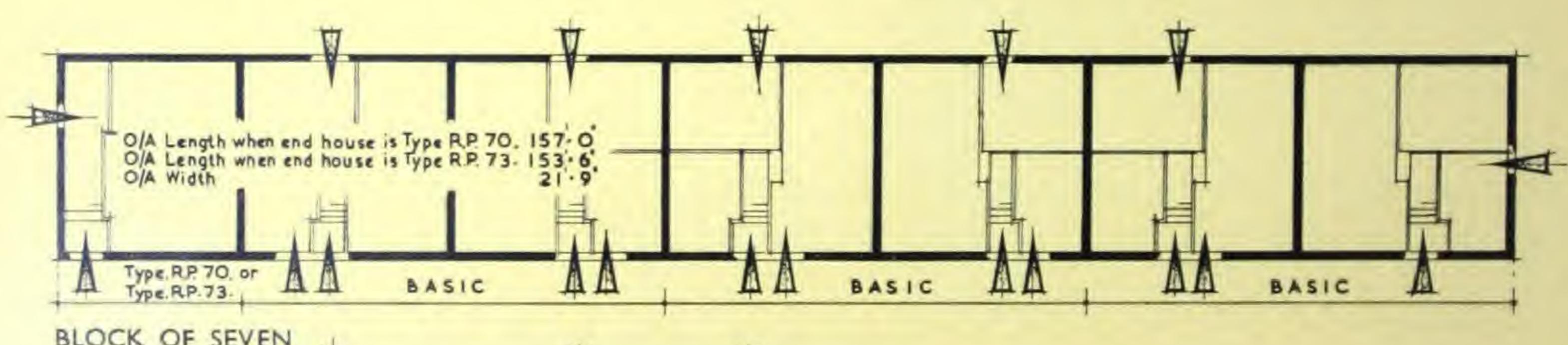
Arrangements in blocks of 8-12, etc., can also be supplied.



NOTES

TERRACE DIAGRAMS ARE BASED ON TYPE R.P.70. 3 BEDROOM BUT MAY BE APPLICABLE TO OTHER TERRACE TYPE HOUSES SUCH AS TYPES:—
R.P.75 2 BEDROOM TERRACE
R.P.77 3 BEDROOM 4 PERSONS
R.P.F.1 3 BEDROOM TERRACE
R.P.F.2 2 BEDROOM TERRACE
TYPE R.P.73 AS AN END HOUSE CAN ONLY BE ADDED TO TERRACES OF TYPES R.P.70 & R.P.77.

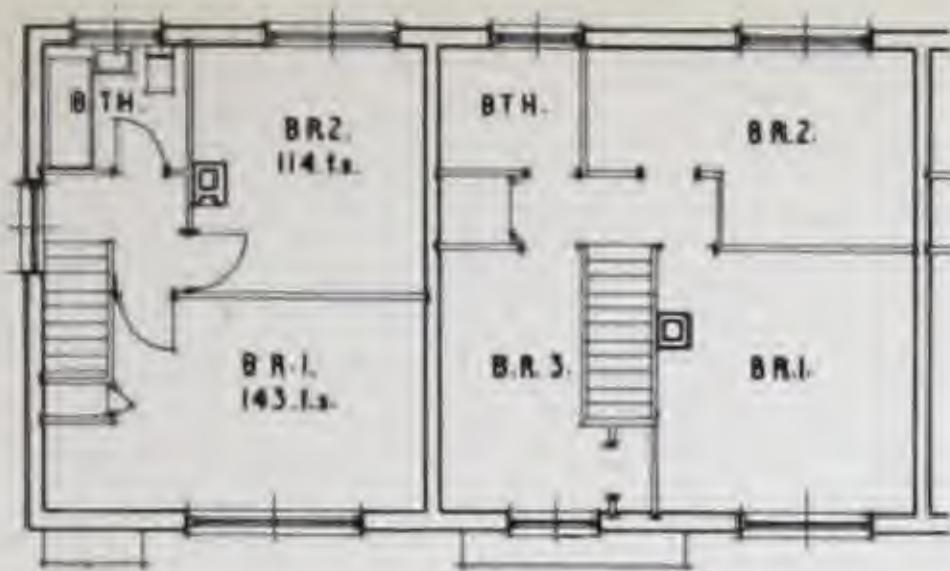
DIAGRAMMATIC ARRANGEMENTS OF TERRACES WITH AN EVEN NUMBER OF HOUSES



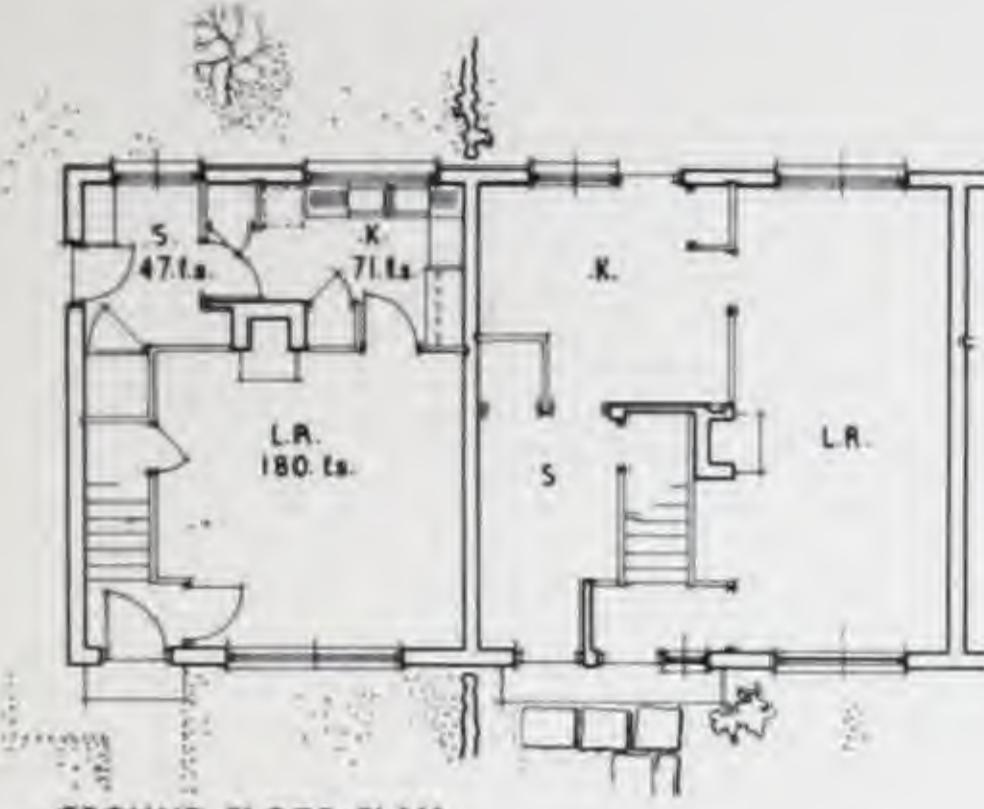
NOTES

TERRACE DIAGRAMS ARE BASED ON TYPE R.P.70. 3 BEDROOM BUT MAY BE APPLICABLE TO OTHER TERRACE TYPE HOUSES SUCH AS TYPES:—
R.P.75 2 BEDROOM TERRACE
R.P.77 3 BEDROOM 4 PERSONS
R.P.F.1 3 BEDROOM TERRACE
R.P.F.2 2 BEDROOM TERRACE
TYPE R.P.73 AS AN END HOUSE CAN ONLY BE ADDED TO TERRACES OF TYPES R.P.70 & R.P.77.

DIAGRAMMATIC ARRANGEMENTS OF TERRACES WITH AN ODD NUMBER OF HOUSES



FIRST FLOOR PLAN



GROUND FLOOR PLAN

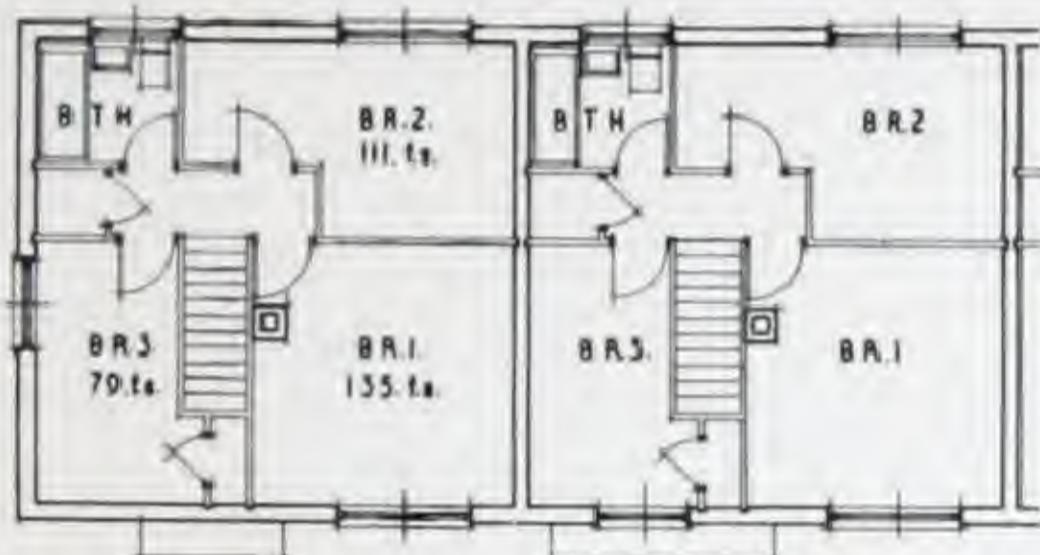


FRONT ELEVATION

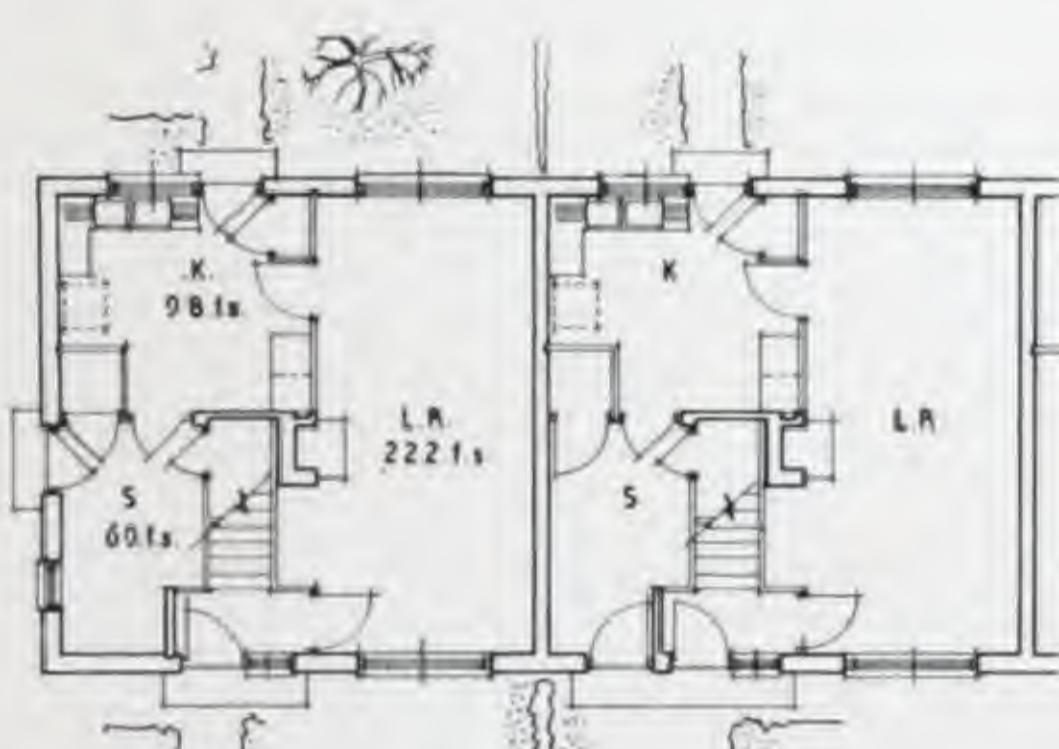
Gross house area	709
Stair	26
Nett house area	683
Aggregate living space	251

TYPE SL/C3/T THREE APARTMENT END HOUSE

SCALE 0 10 20 30 40 FEET



FIRST FLOOR PLAN



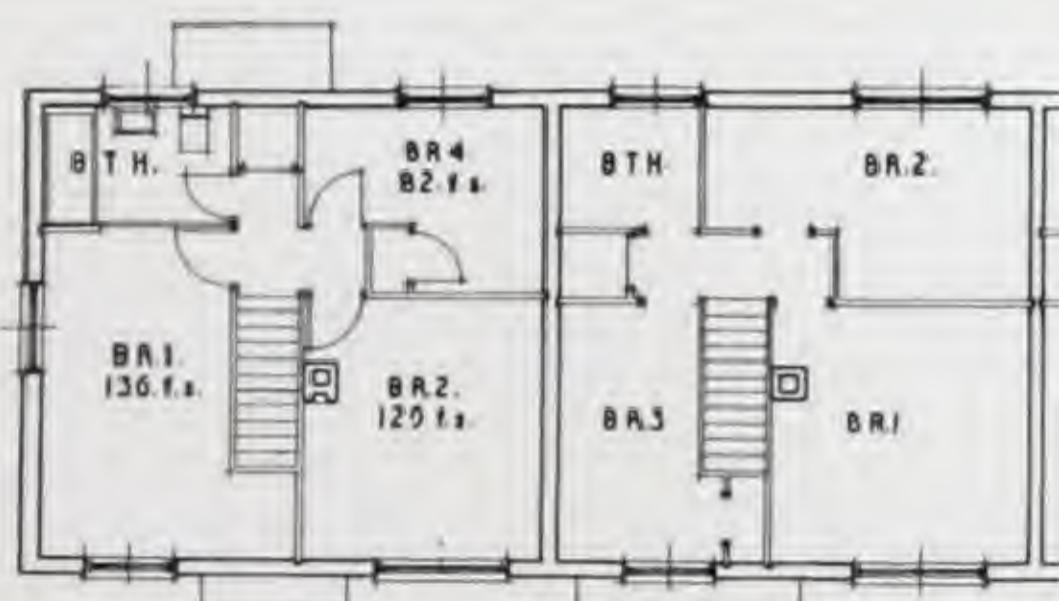
GROUND FLOOR PLAN



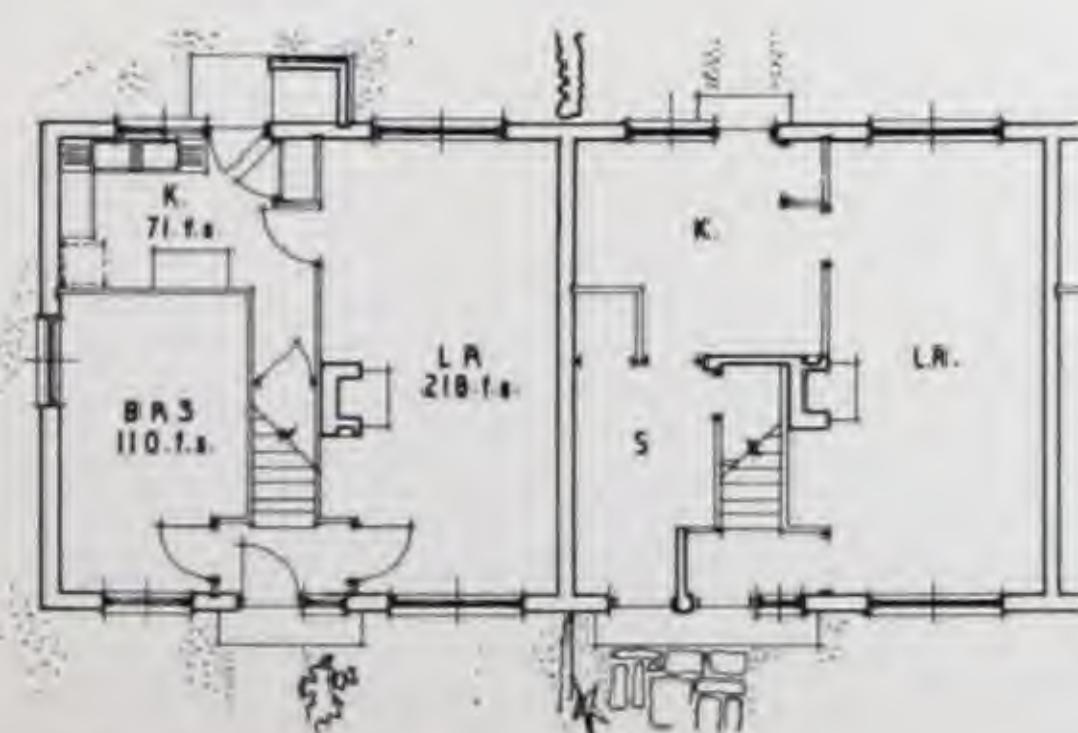
FRONT ELEVATION

Gross house area	885
Stair	26
Nett house area	859
Aggregate living space	320

TYPE SL/C4/T FOUR APARTMENT - UNIVERSAL ASPECT



FIRST FLOOR PLAN



GROUND FLOOR PLAN



FRONT ELEVATION

Gross house area	936
Stair	26
Nett house area	910
Aggregate living space	289

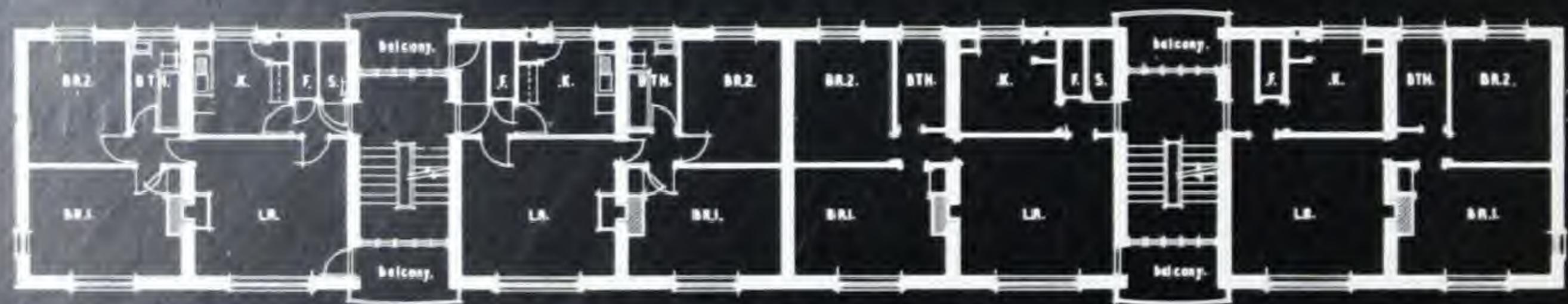
TYPE SL/C5/T FIVE APARTMENT END HOUSE - UNIVERSAL ASPECT

AT A TIME WHEN EVERY LOCAL AUTHORITY is constantly

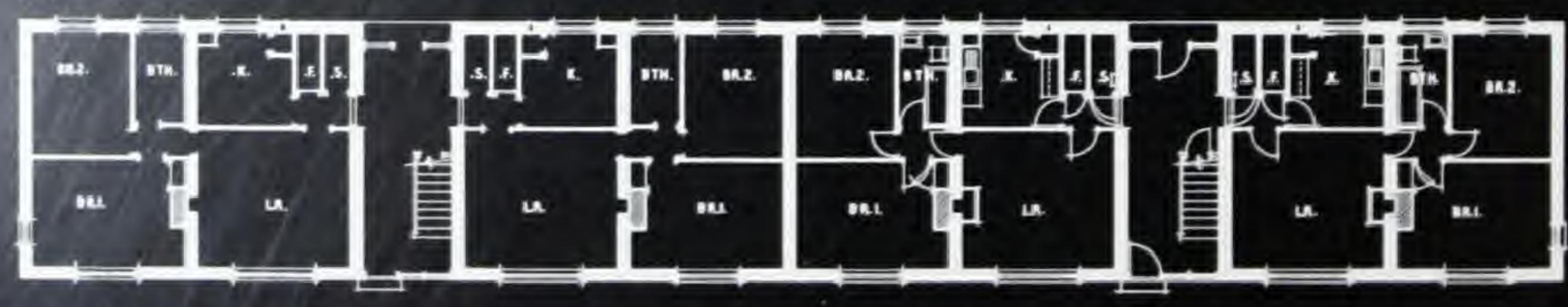
reminded of the need to build upwards in order to conserve space on the ground, No-fines flats are quite obviously of great interest. The two-storey flat is offered because it is generally regarded as the cheapest form of accommodation, and many authorities have put it to good use. The occupants of both flats are able to have a small garden. The advantages of three-storey No-fines flats are many and varied. They are, of course, very quickly erected. We have brought to their development the same mechanized methods adopted with houses. A shutter the full height of the building is used, and the three storeys are poured in one operation. This is made possible by the absence of hydrostatic pressure on the shutters, owing to the dry mix. Thus we are able to pour the complete shell before any other operation is begun, floors being put in as a second and entirely separate operation. Quite apart from the value of these three-storey flats as a variant in neighbourhood units, especially in breaking the skyline when mixed with houses, they are economic inasmuch as no lifts or dust-chutes are necessary. A further development has been the four-storey flat, although in this case we pour two storeys at a time, the second floor acting as diaphragm. Approval has been obtained from the Ministry of Housing and Local Government whereby even with four-storey flats the local authorities have the option of saving the cost of lifts and chutes at their discretion.



FLATS
TWO, THREE AND
FOUR-STOREY



U P P E R F L O O R S



G R O U N D F L O O R scale feet



THREE-STORY FLATS



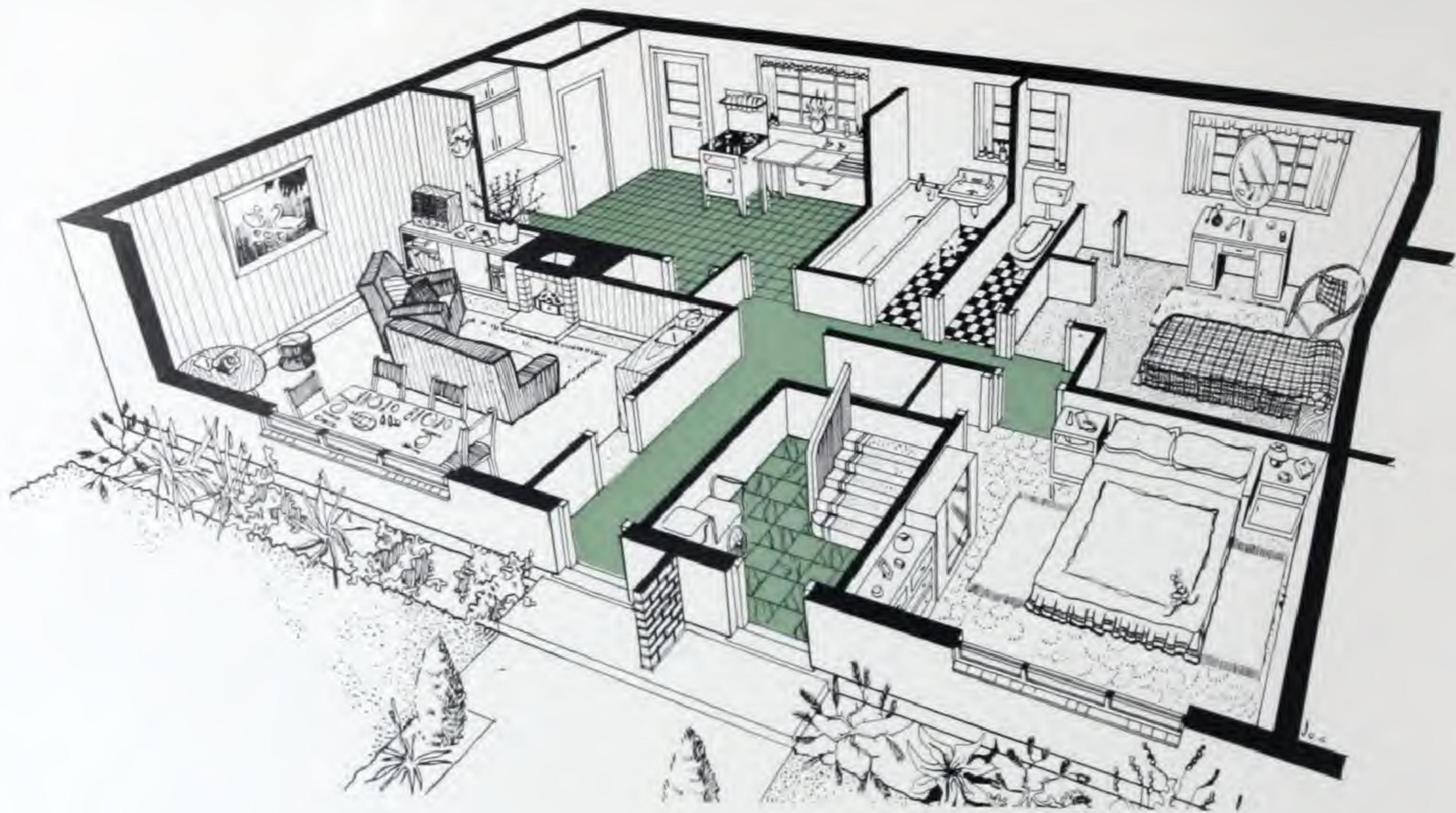
The colour study on the left shows a typical block of three-storey flats built at Coventry

These flats were built to the basic design for Scotland, which has been approved by the Scottish Department of Health, and which include the specific requirements of Scottish authorities. There is a larger superficial area, particularly in the bedrooms, and special kitchen fittings. In addition, a number of three-bedroom or four-apartment flats have been incorporated into the scheme.





Photograph on left shows a block of two-storey flats in No-fines built for the Urban District Council of Farnborough, Hants.



Perspective sketch with walls cut away shows a typical flat in the two-storey block





Flats built at Allesley, Birmingham



COVENTRY

The design of the City Architect for these flats has been adapted to the No-fines technique, and they provide an outstanding example of the versatility of this method of construction. The flats were designed to save corridor space, the bathroom and bedrooms being approached through a small internal lobby off the living-room. Each upper floor flat has a private balcony

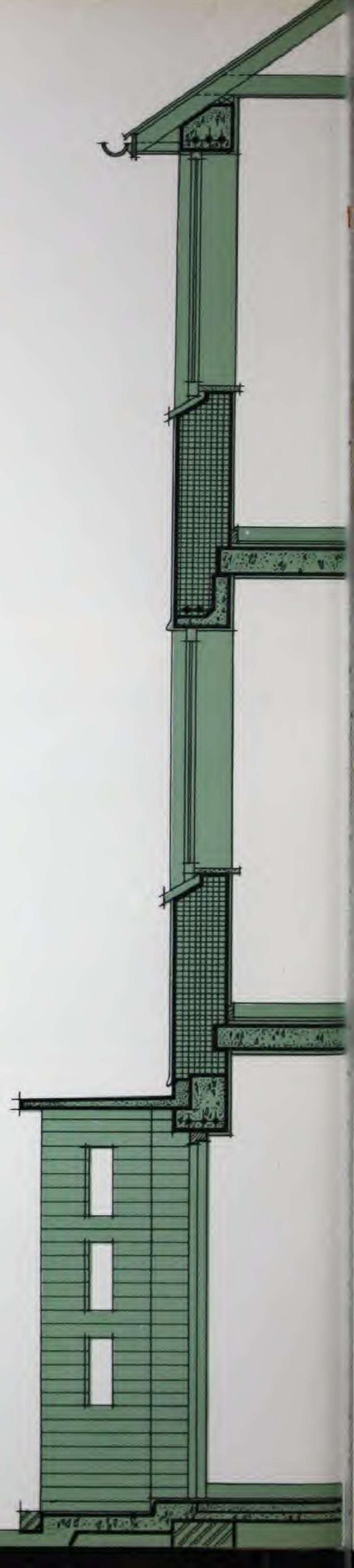




Photographs show close-up view of balcony
on one of the No-fines sites



The drawn detail on the right shows a section
through the front wall of a block
of three-storey flats





1



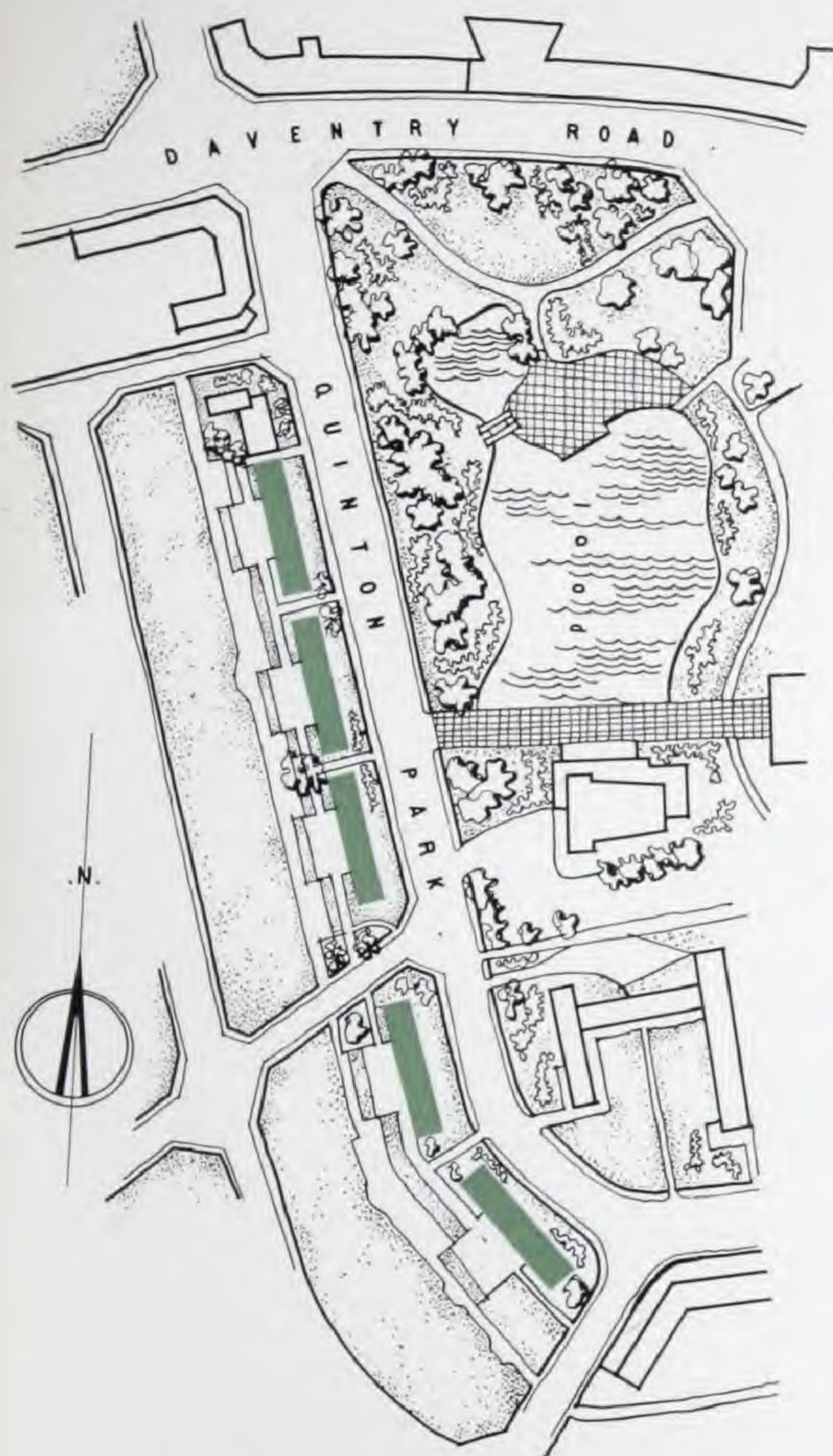
Photograph 1 shows the entrance approach to three-storey flats on a No-fines site. Photograph 2 shows stepped blocks of flats built at Fletchampsted. Photograph 3 was taken in Newcastle, where three-storey flats have been built at Slatyford Lane; note the entrance treatment and large-pane windows

2



3

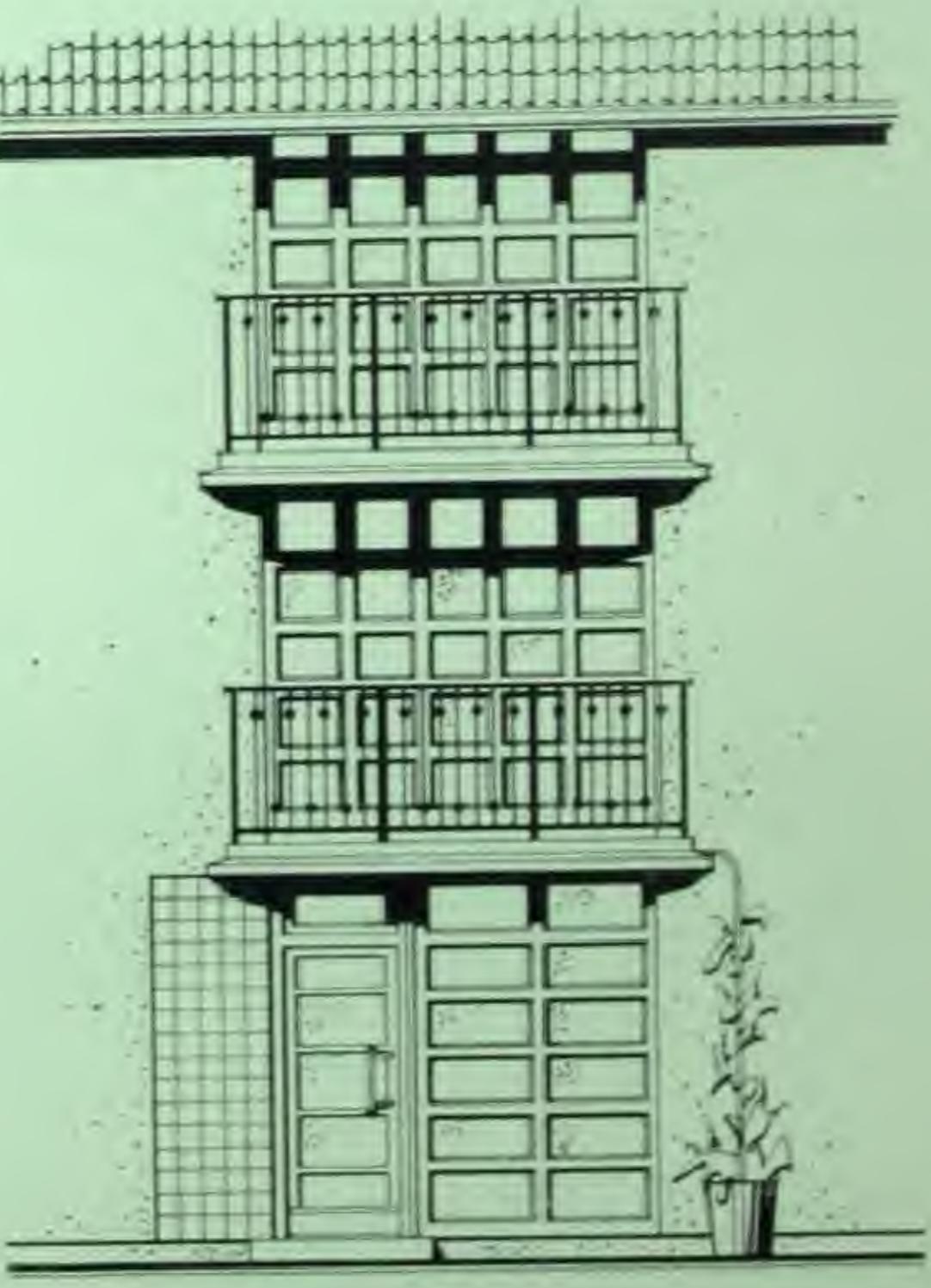
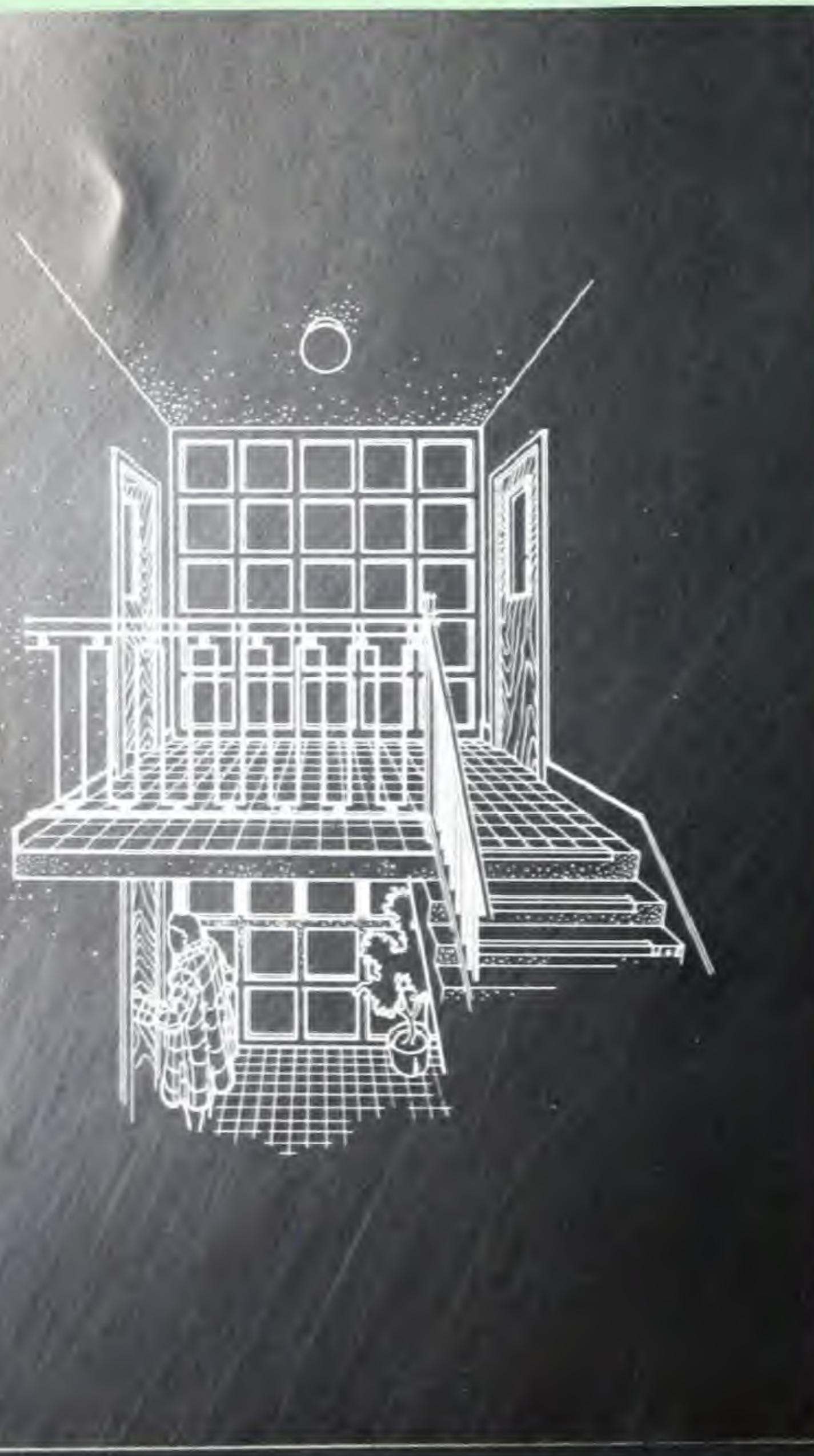
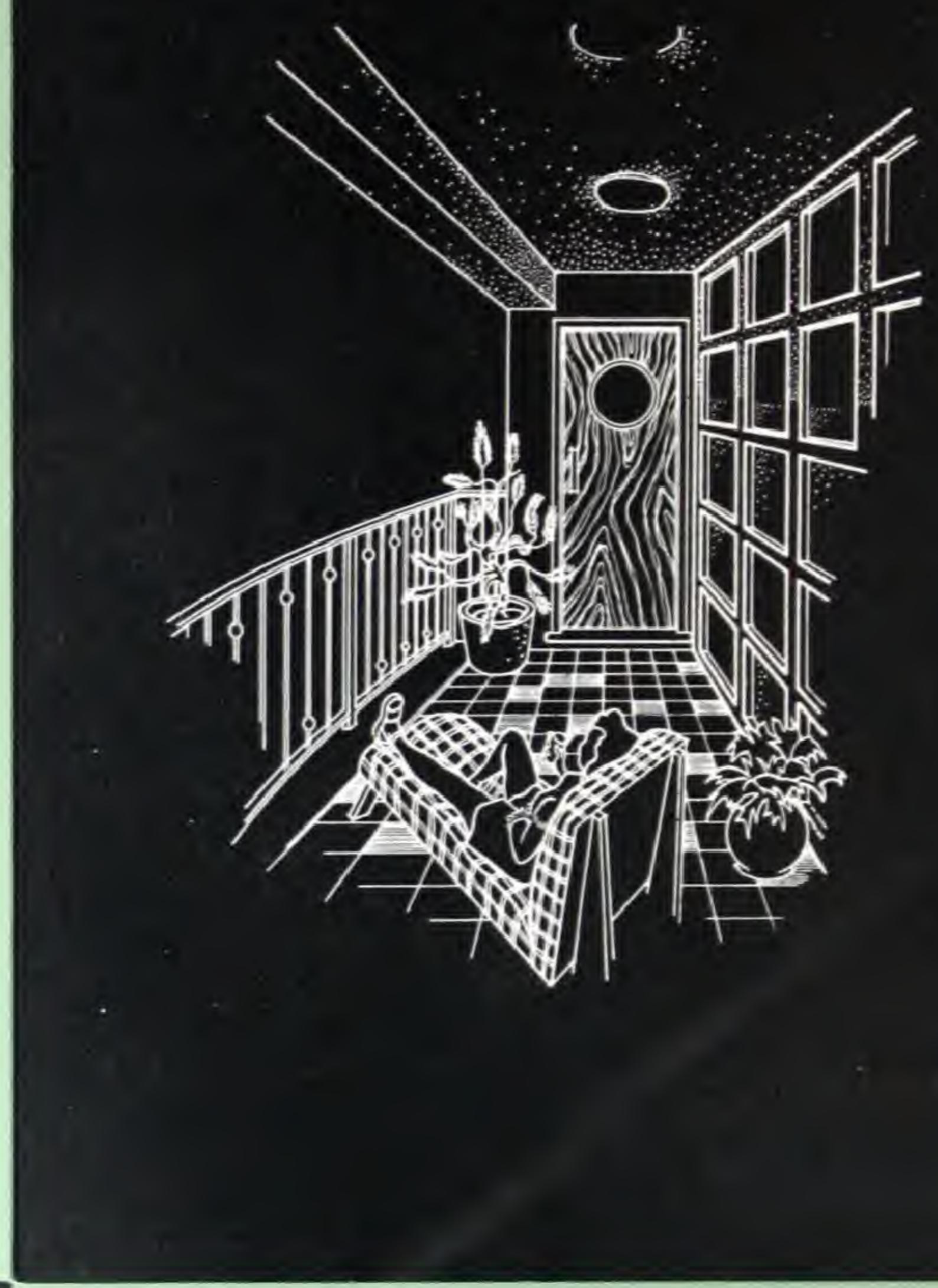




Site plan shows No-fines flats in Quinton Park District Centre, Coventry

A number of three-storey No-fines blocks of flats are being built as part of the proposed Quinton Park district centre, which provides social and shopping facilities for a population of 14,000. The Quinton Pool, Cheylesmore, which lies on an island site, was constructed for a mill dam in the seventeenth century and will form the centre-piece of the estate. A health centre, swimming bath, cinema, library, Baptist church and community centre will be included

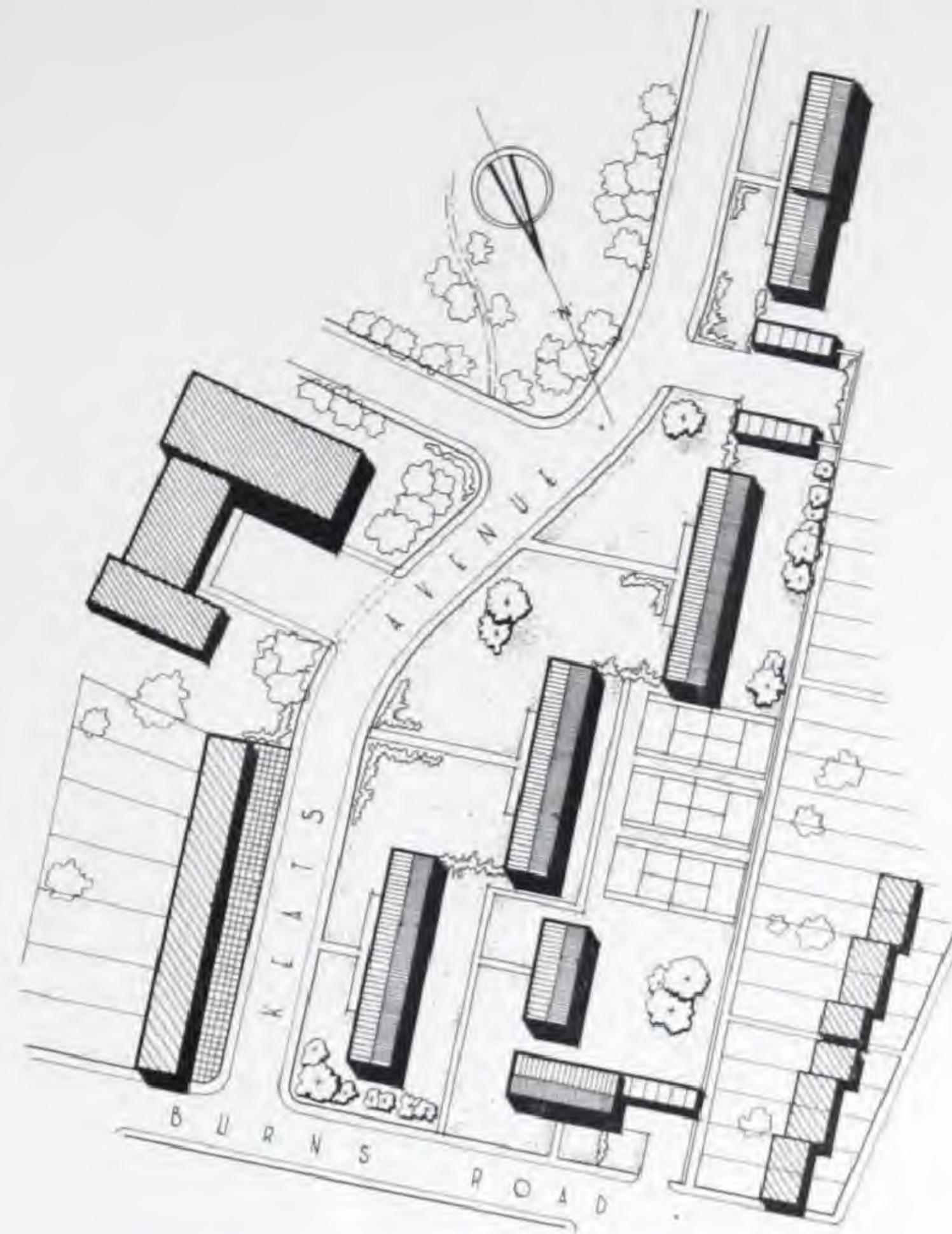




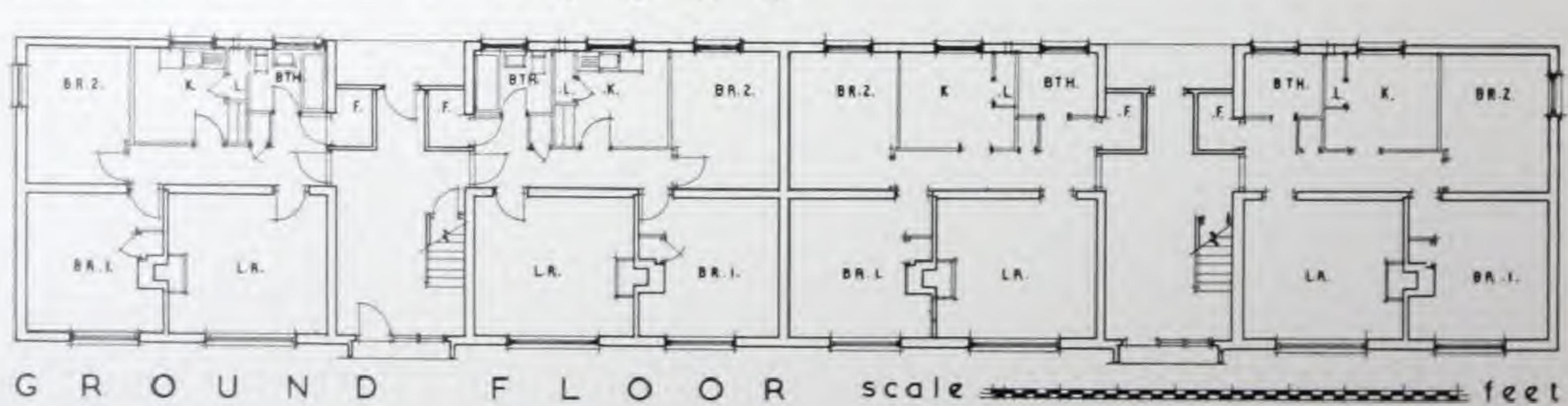
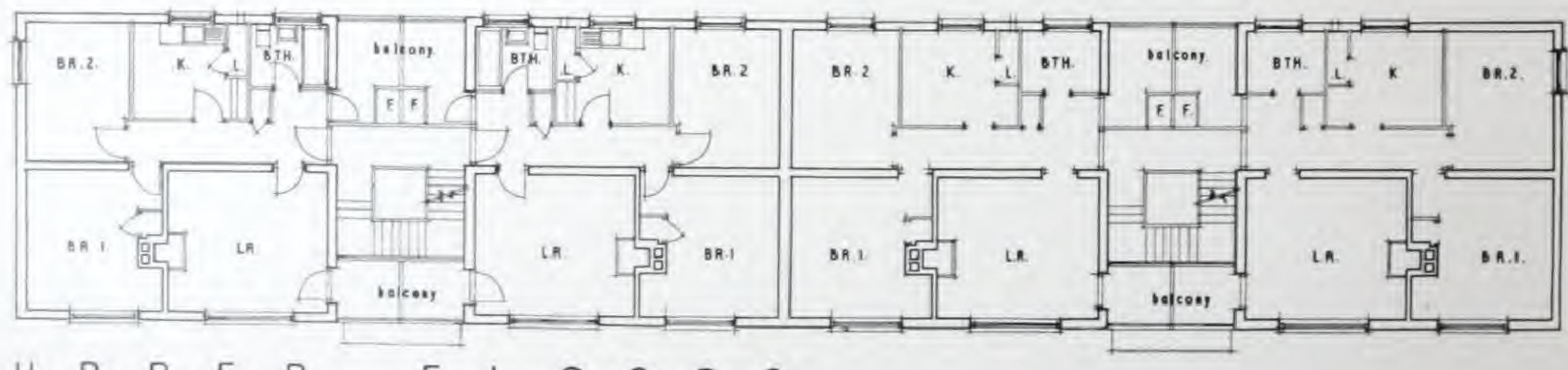
The sketches on the opposite page show two of the many balcony types used for No-fines flats. The use of No-fines does not preclude any special treatment which tends to make the elevation more attractive



Bird's-eye view showing flats on part of a No-fines site



Flats built at Kirkcaldy, Scotland



scale feet

SOUTHAMPTON



Photographs on these two pages are of flats at Southampton

Our initial contract was for 372 flats. A basic Wimpey plan, with only minor amendments, has been used, but these slight alterations do give a variation in elevation for those blocks with a north aspect, and there is a difference in access to the stairways. All the flats so far built for this Authority have two bedrooms.

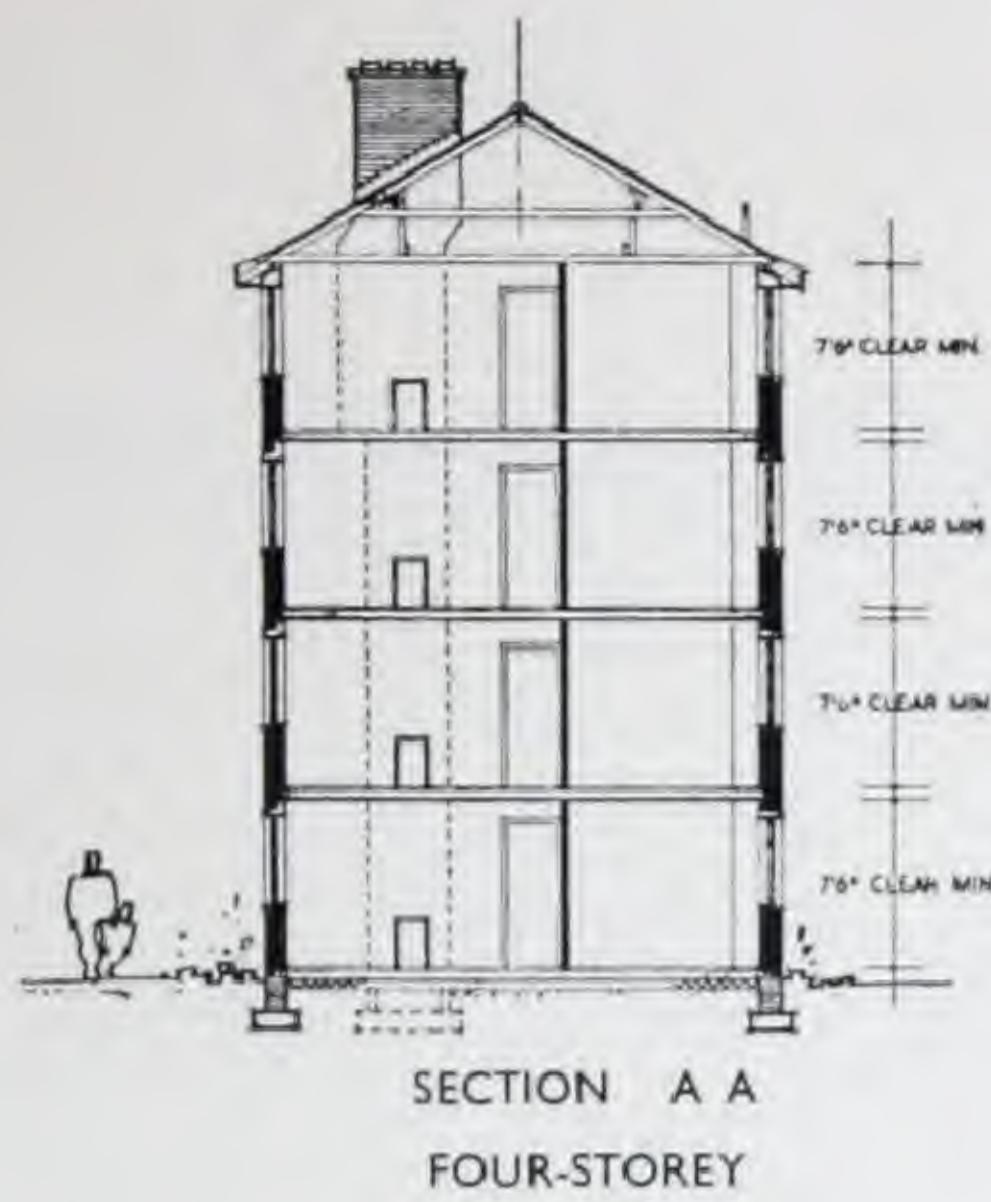
Engineer and Surveyor: F. L. Wooldridge, M.I.C.E., M.I.Mun.E.



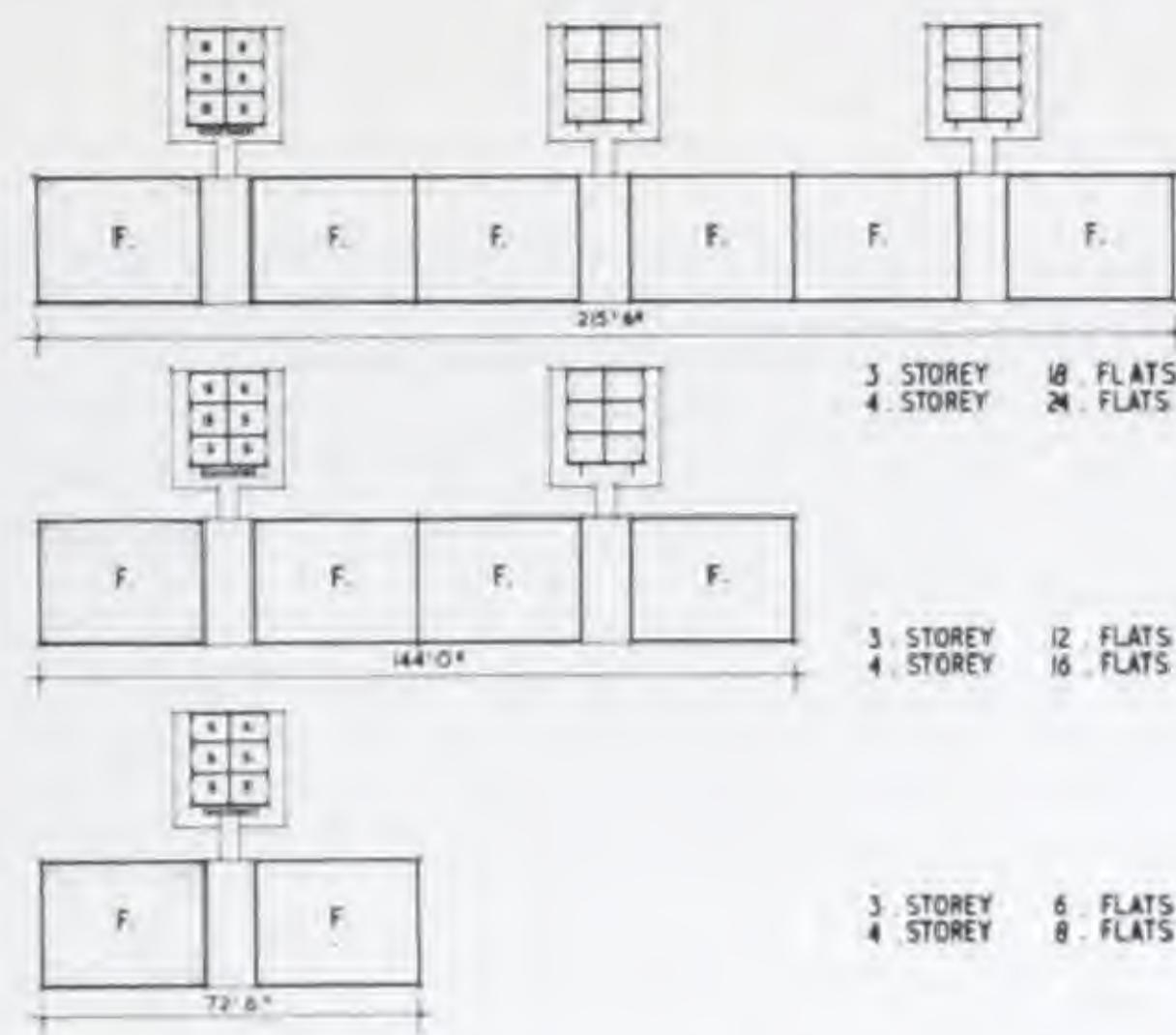
FOUR-STORY FLATS



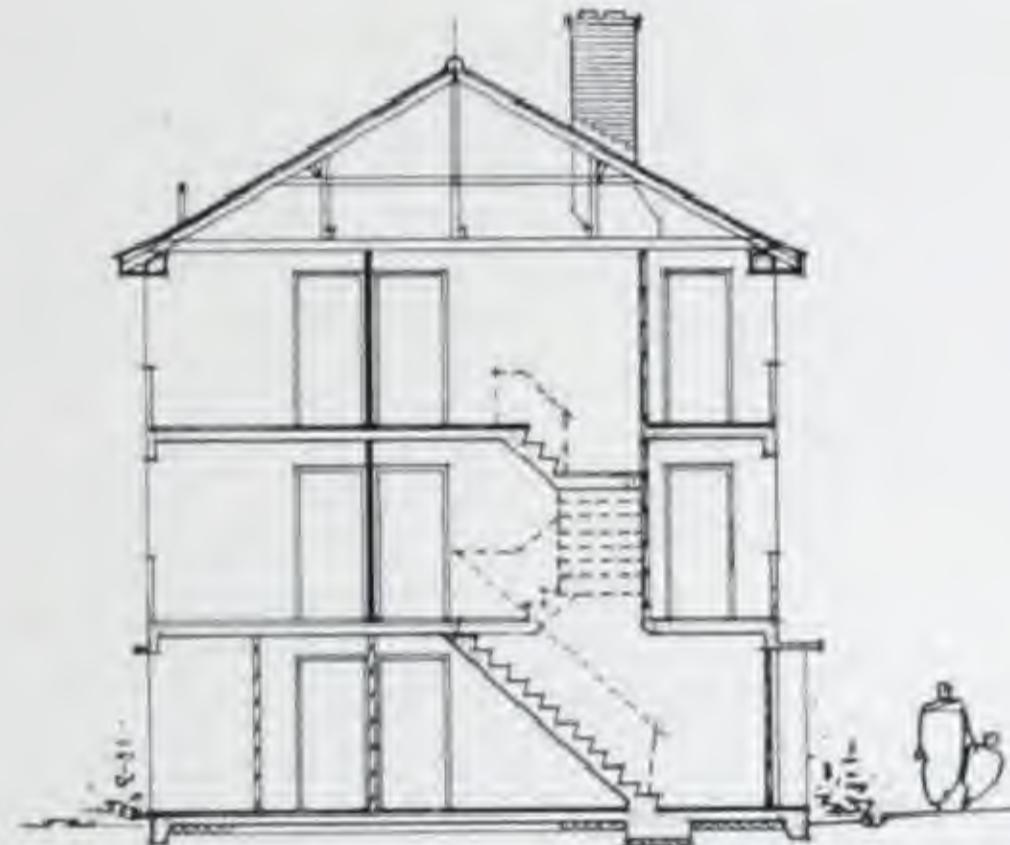
The Wimpey system of No-fines construction has been successfully applied to the erection of three-storey flats over a number of years. These flats were designed having load-bearing walls and a minimum of steel, and the use of brickwork has been eliminated except in the construction of stacks. A further innovation is the application of these features to the construction of four-storey flats, which, we feel, will prove equally popular. Design Types 100 and 101 provide access to the bedroom hall through the living room, whereas, if desired, a through passage can be provided as in Design Types 102 and 103. These designs are shown on the following pages of this book.



SECTION A A
FOUR-STOREY



DIAGRAMMATIC PLANS SHOWING VARIOUS ARRANGEMENTS OF BLOCKS OF FLATS

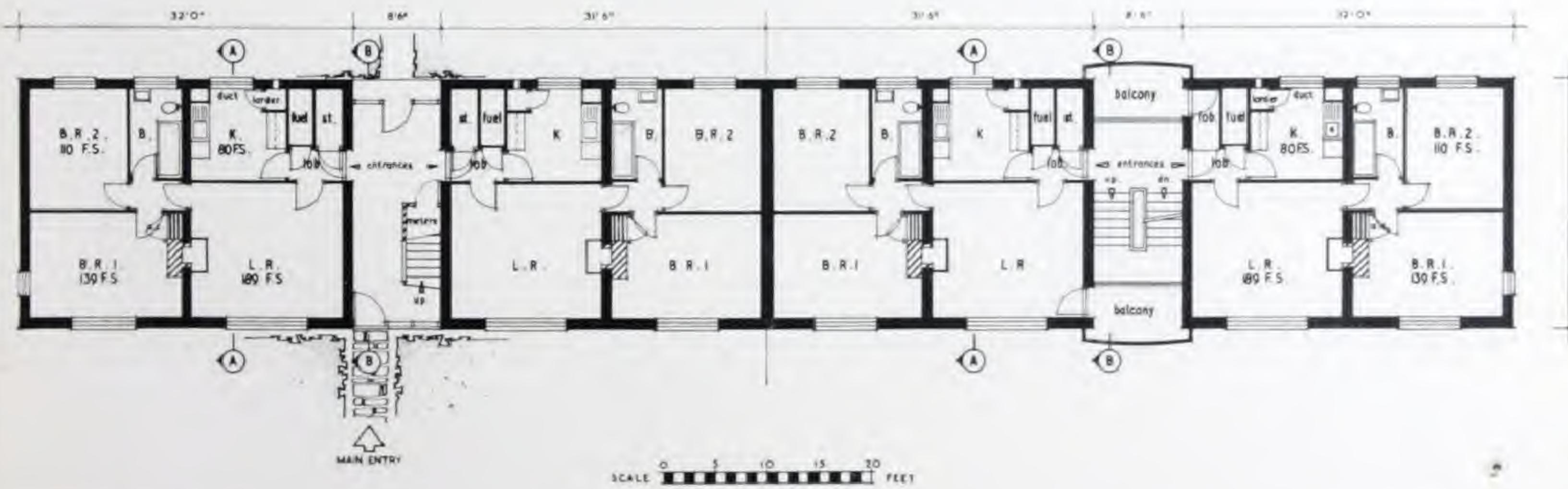


SECTION B B
THREE-STOREY

FLOOR AREA PER FLAT

660 SQ. FT.

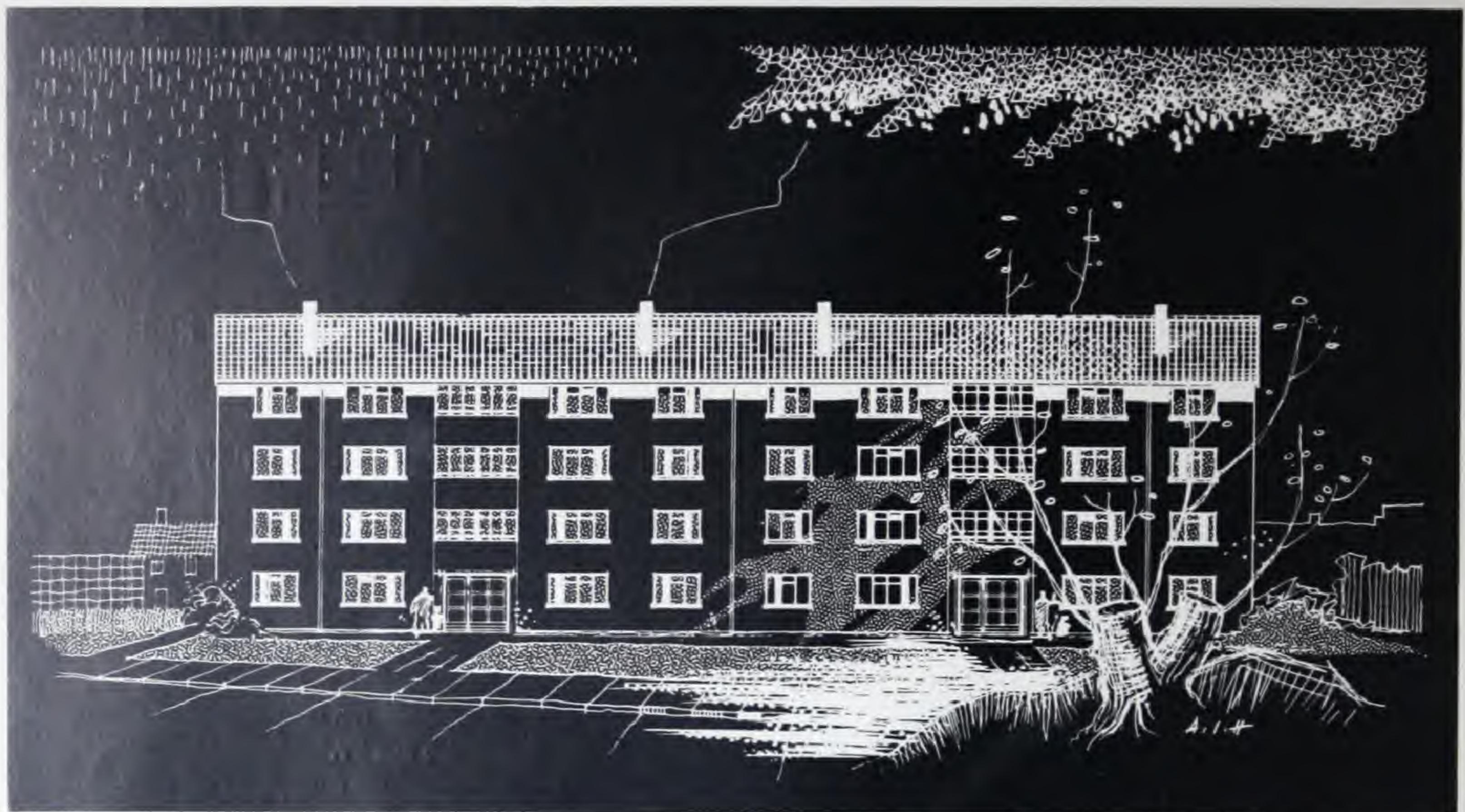
Excluding staircase and balcony areas



GROUND FLOOR

UPPER FLOORS

TYPE 100 AND TYPE 101
THREE-STOREY FOUR-STOREY

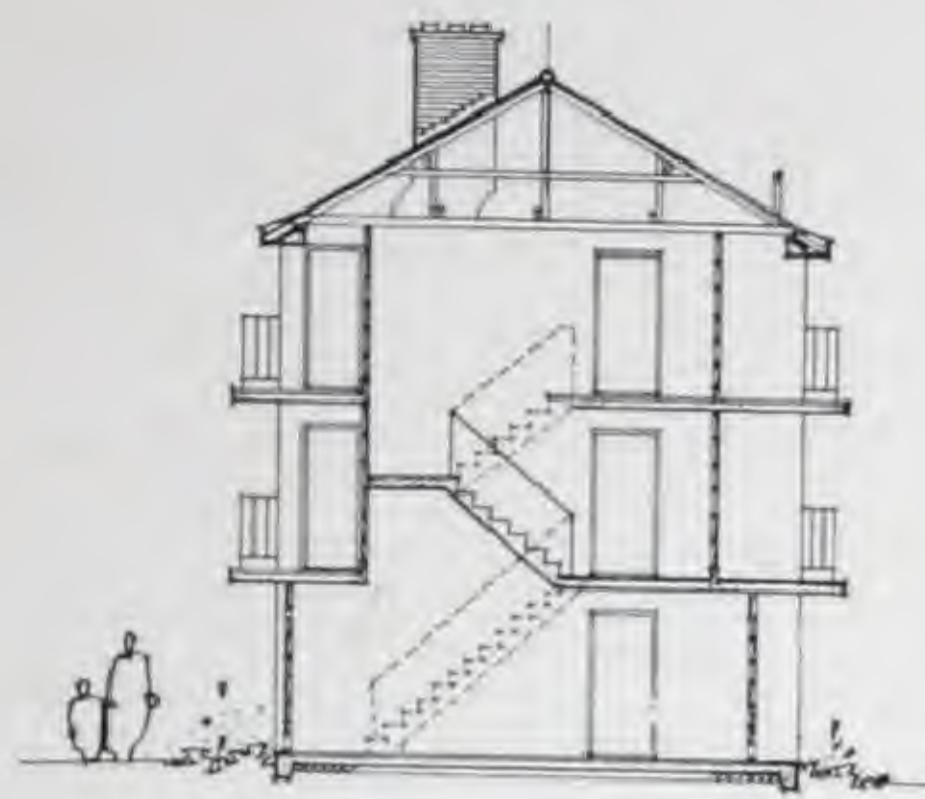


F R O N T E L E V A T I O N

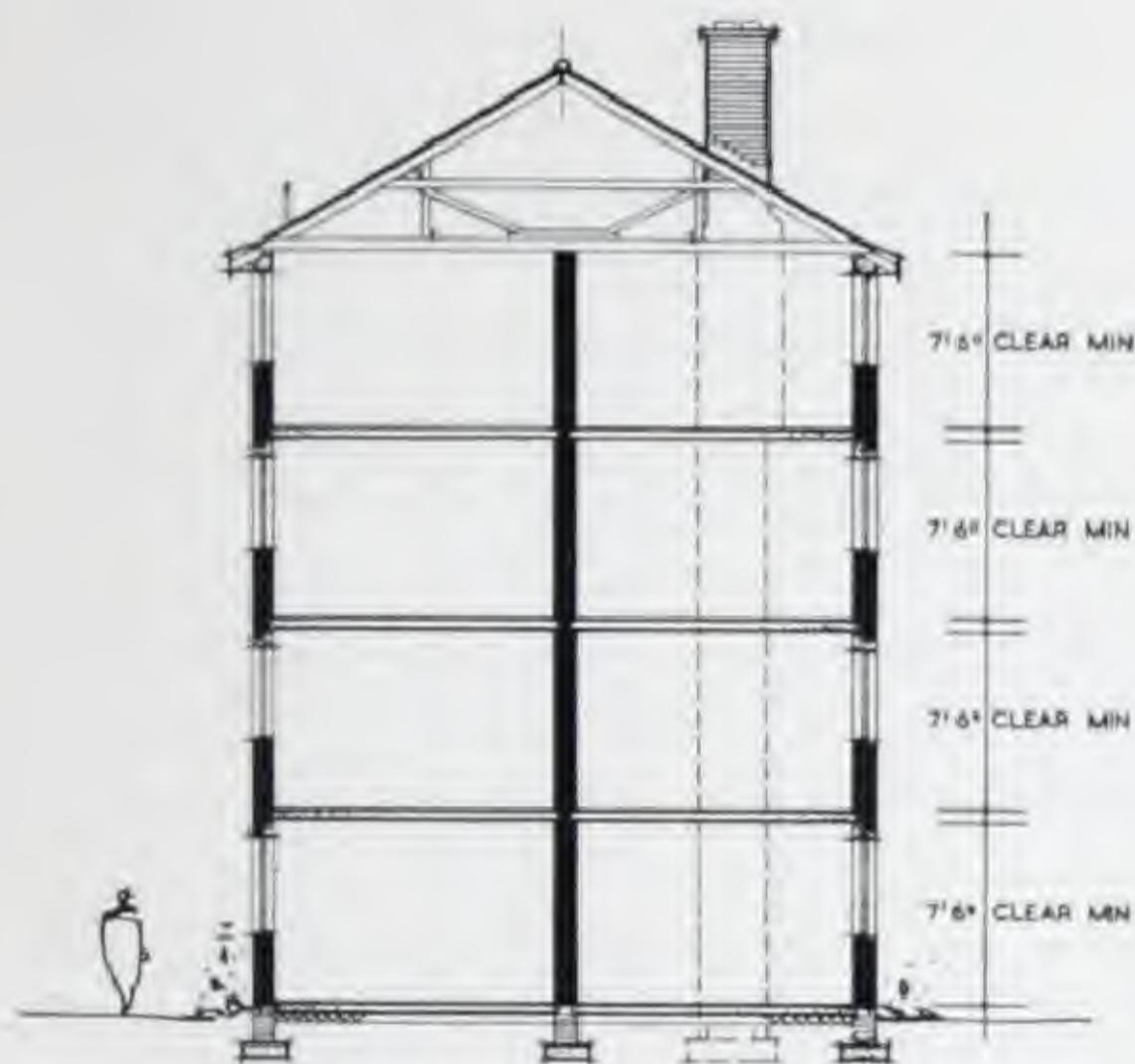
The four-storey flats in No-fines concrete which are at present under construction at Bishop's Stortford and Coventry are a simple development of the earlier three-storey accommodation.

One vital difference, however, is that whereas three-storey flats are erected in one pour, two separate operations are necessary when four-storey flats are erected. They are poured two storeys at a time, and a diaphragm floor is put in at second storey level.

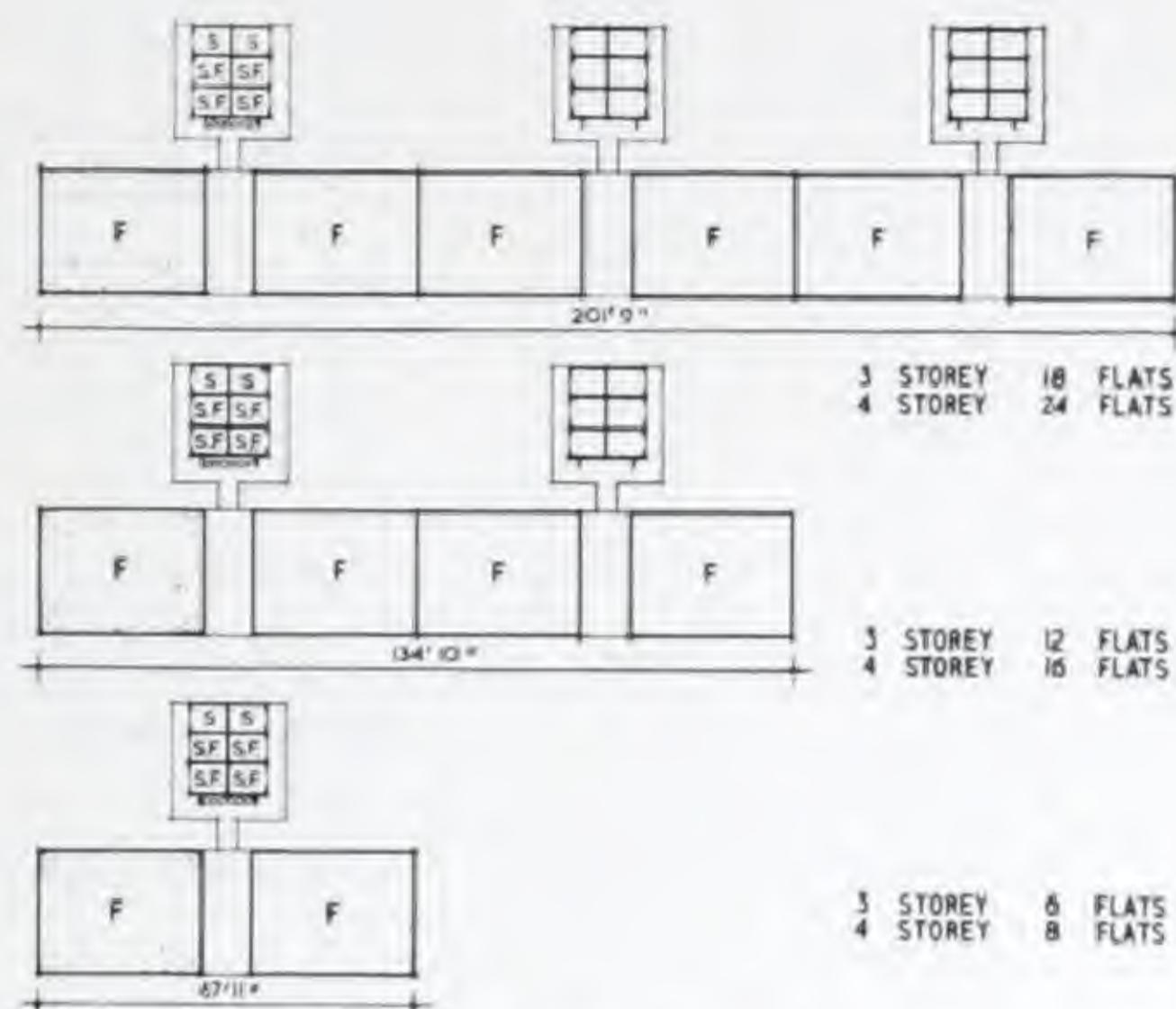
The walls consist of 12-in. No-fines concrete, and there is no reinforced frame. Provision of lifts is at the discretion of local authorities.



SECTION A A
THREE-STORY



SECTION B B
FOUR-STORY

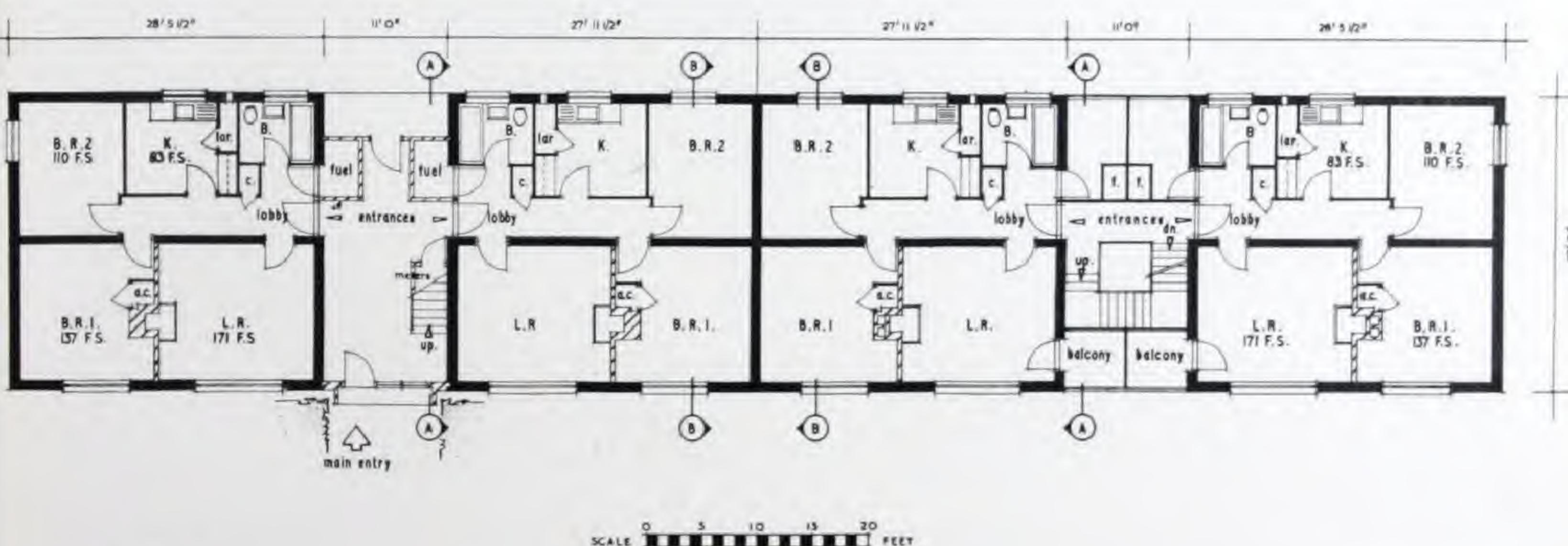


DIAGRAMMATIC PLANS SHOWING VARIOUS
ARRANGEMENTS OF BLOCKS OF FLATS

FLOOR AREA PER FLAT

662 SQ. FT.

Excluding Balcony Staircase and Fuel



GROUND FLOOR

UPPER FLOORS

TYPE 102 AND TYPE 103
THREE-STORY FOUR-STORY

IT WILL BE READILY REALIZED THAT THERE IS FAR MORE



general interest in multi-storey flats than in houses because, being a landmark in the district, they are the subject of much interest and rigid scrutiny. Thus the design and planning become vitally important factors. The flats shown here have been built for the Birmingham Corporation in the shape of a star. We are, of course, not tied to this shape; in fact, some sites could not easily take it. In this case, it involves the adoption of a plan shape with the idea of getting the most out of lifts and staircases, both of which are very expensive items. An eleven-storey block to be built at Coventry introduces the idea of having 'skip' floors, so that the tenant walks up or down one flight of stairs. Thus the lift stops at the third, sixth and ninth floors, providing an economy in the lifts. A promising development is the planning of multi-storey maisonettes which allow even greater economy of lifts, quite apart from other advantages. Such accommodation more readily lends itself to long blocks, which can be straight where required for aspect. The sound-proofing of floors is an important problem, and in these flats at Birmingham the B.R.S. recommended floating floor is being used, comprising glass wool and a concrete sub-floor with a tiled surface. The disposal of refuse is dealt with by the provision of dust chutes, and communal clothes drying rooms are provided at each floor level. We find multi-storey flats are frequently required to provide the one and two-bedroom accommodation, leaving houses to provide the necessary three-bedroom accommodation where gardens are usually far more essential.

FLATS
SIX AND
EIGHT-STOREY

SIX-STOREY FLATS TYPE 53



SOUTH ASPECT

SOUTH WING FLAT. 2 BEDROOMS

Gross Area	727 f.s.
B.R.1	135 f.s.
B.R.2	135 f.s.
L.R.	211 f.s.
K.	80 f.s.

N.E. AND N.W. WINGS. 1 BEDROOM FLAT

Gross Area	500 f.s.
B.R.	146 f.s.
L.R.	144 f.s.
K.	85 f.s.

N.E. AND N.W. WINGS. 2 BEDROOM FLAT

Gross Area	727 f.s.
B.R.1	142 f.s.
B.R.2	126 f.s.
L.R.	211 f.s.
K.	79 f.s.

NORTH ASPECT

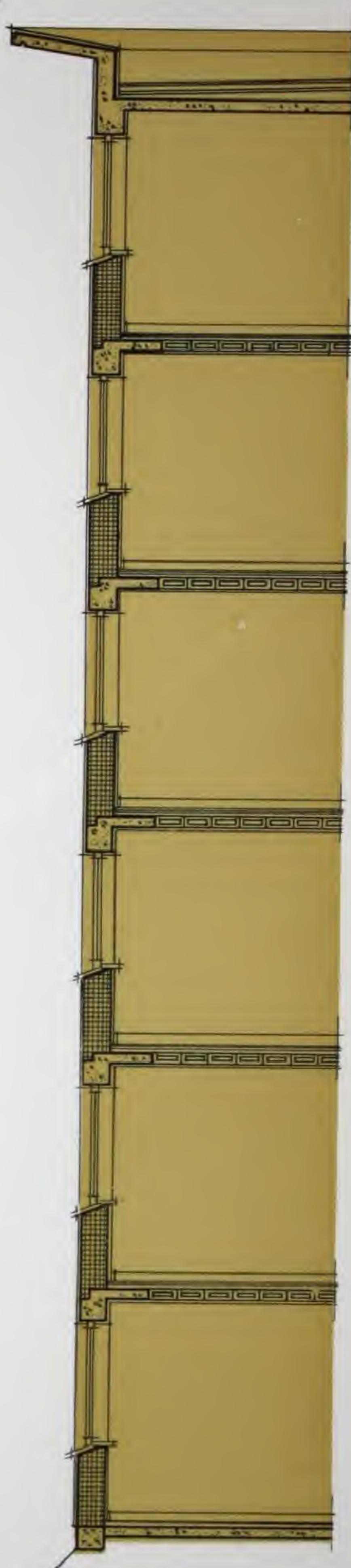


Photographs show flats built at Birmingham
 H. J. Manzoni, C.B.E., M.I.C.E., *City Engineer and Surveyor*
 A. G. Sheppard Fidler, F.R.I.B.A., *City Architect*
 D. H. Davies, F.R.I.B.A., A.M.T.P.I., *Housing Architect*



Photograph shows entrance detail with weather screens at each landing





Photograph on left shows
private balconies to flats

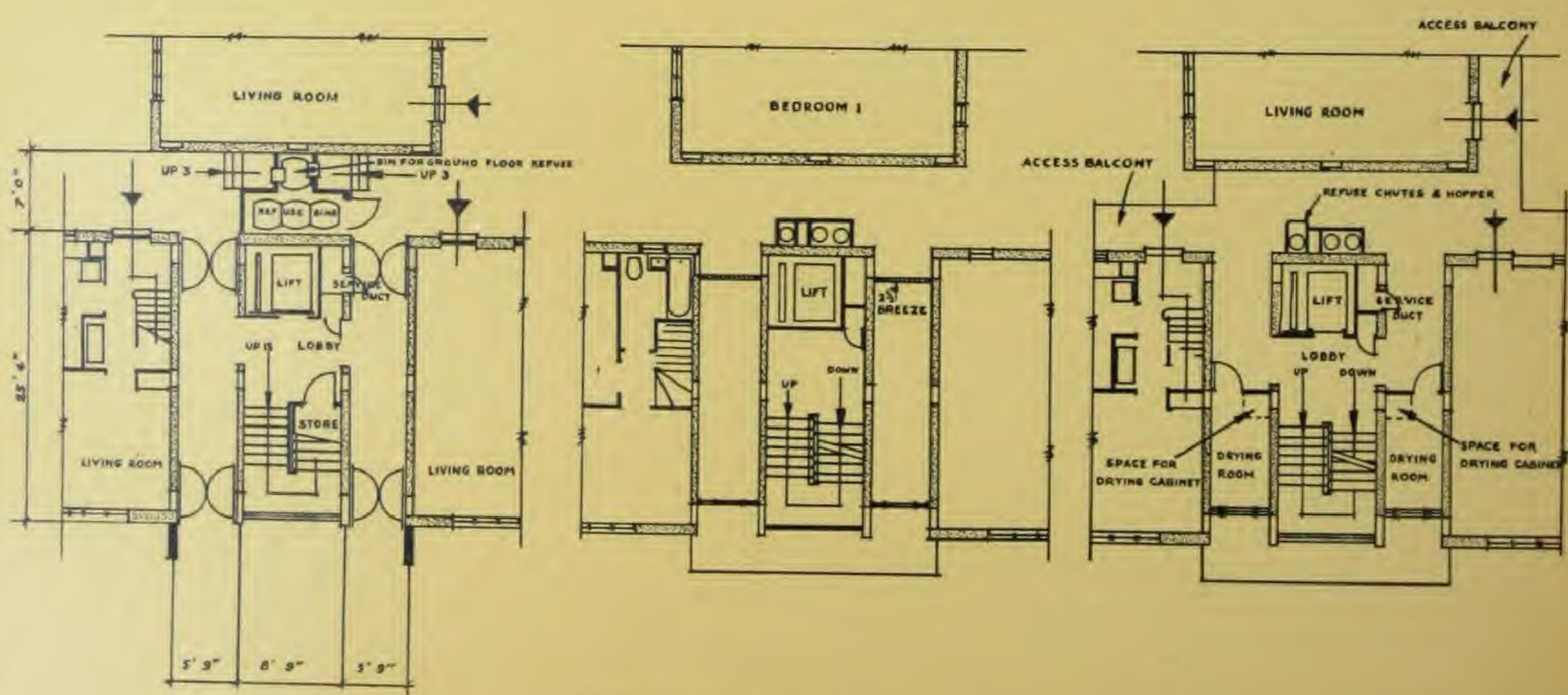
Photograph below shows access balconies. Note special pre-cast balcony front with in situ capping requiring minimum maintenance. The spar finish to these panels provides colour contrast to the main wall finish





TYPE 600

Maisonettes

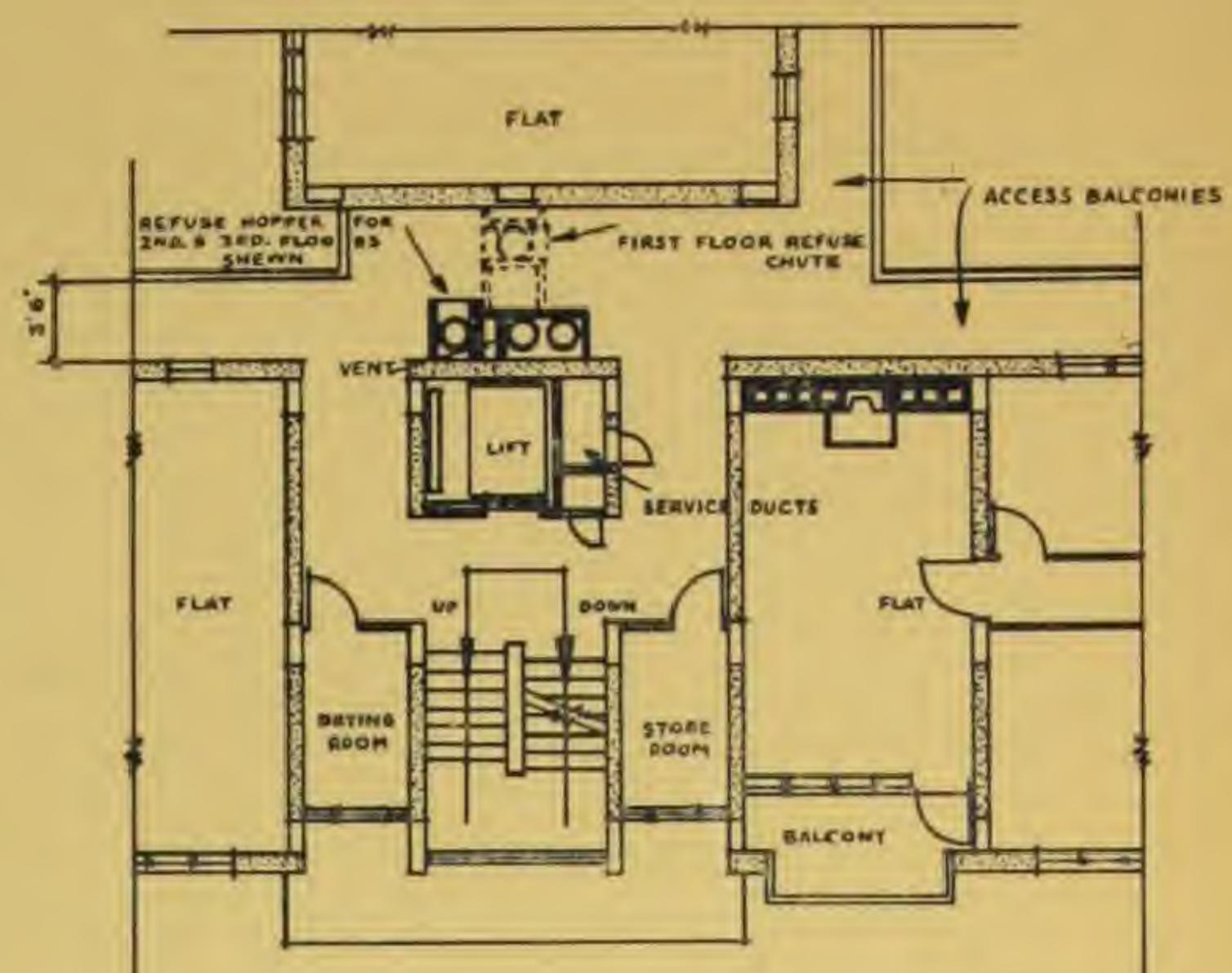
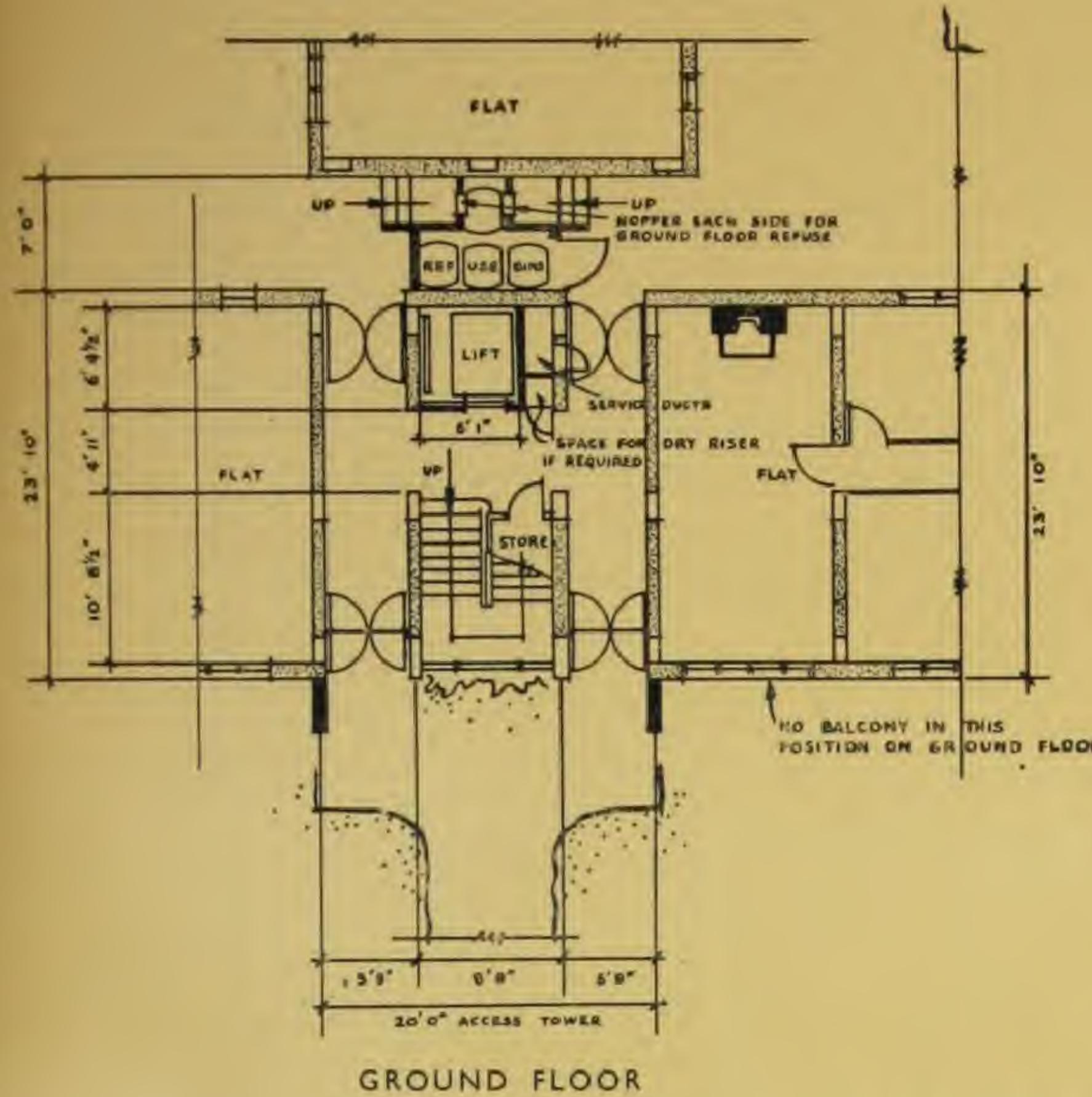


GROUND FLOOR
(Maisonette lower floor)

FIRST FLOOR (3rd, 5th and 7th similar)
(Maisonette upper floor)

SECOND FLOOR (4th and 6th similar)
(Maisonette lower floor)

PLANS OF CENTRAL ACCESS TOWERS



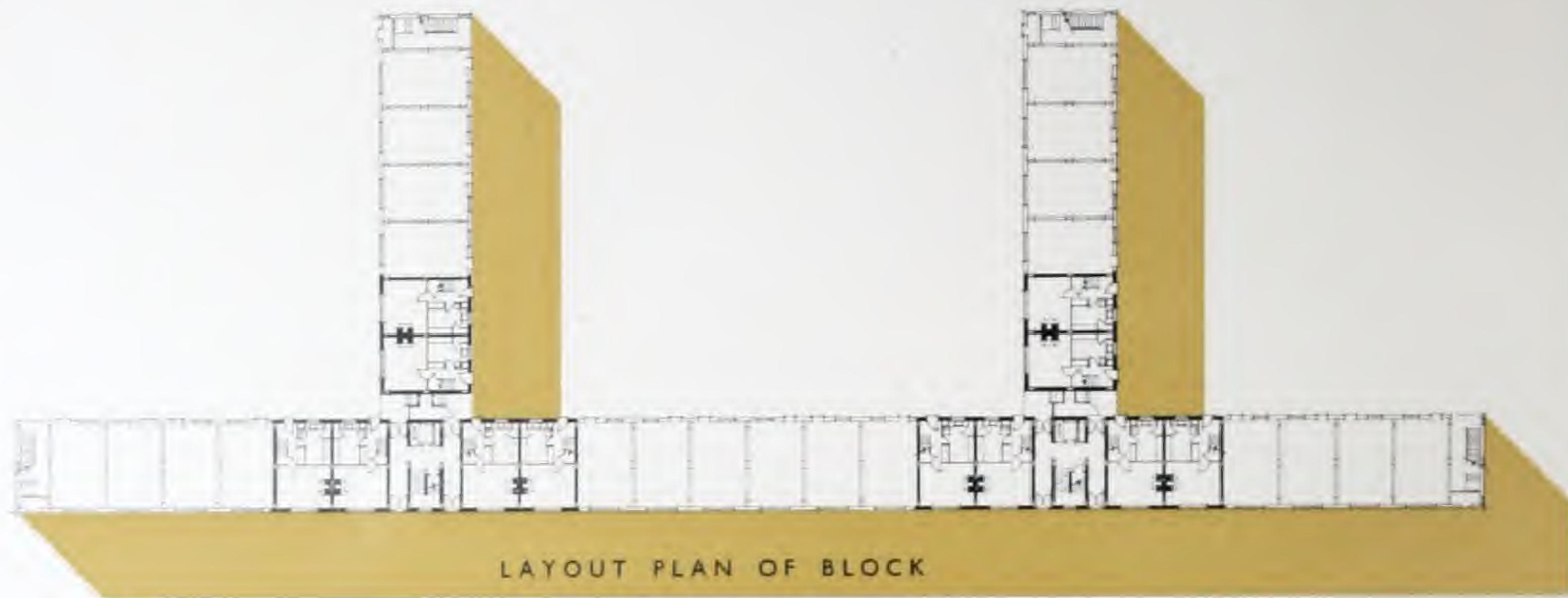
PLANS OF CENTRAL ACCESS TOWERS

TYPE 601

Flats



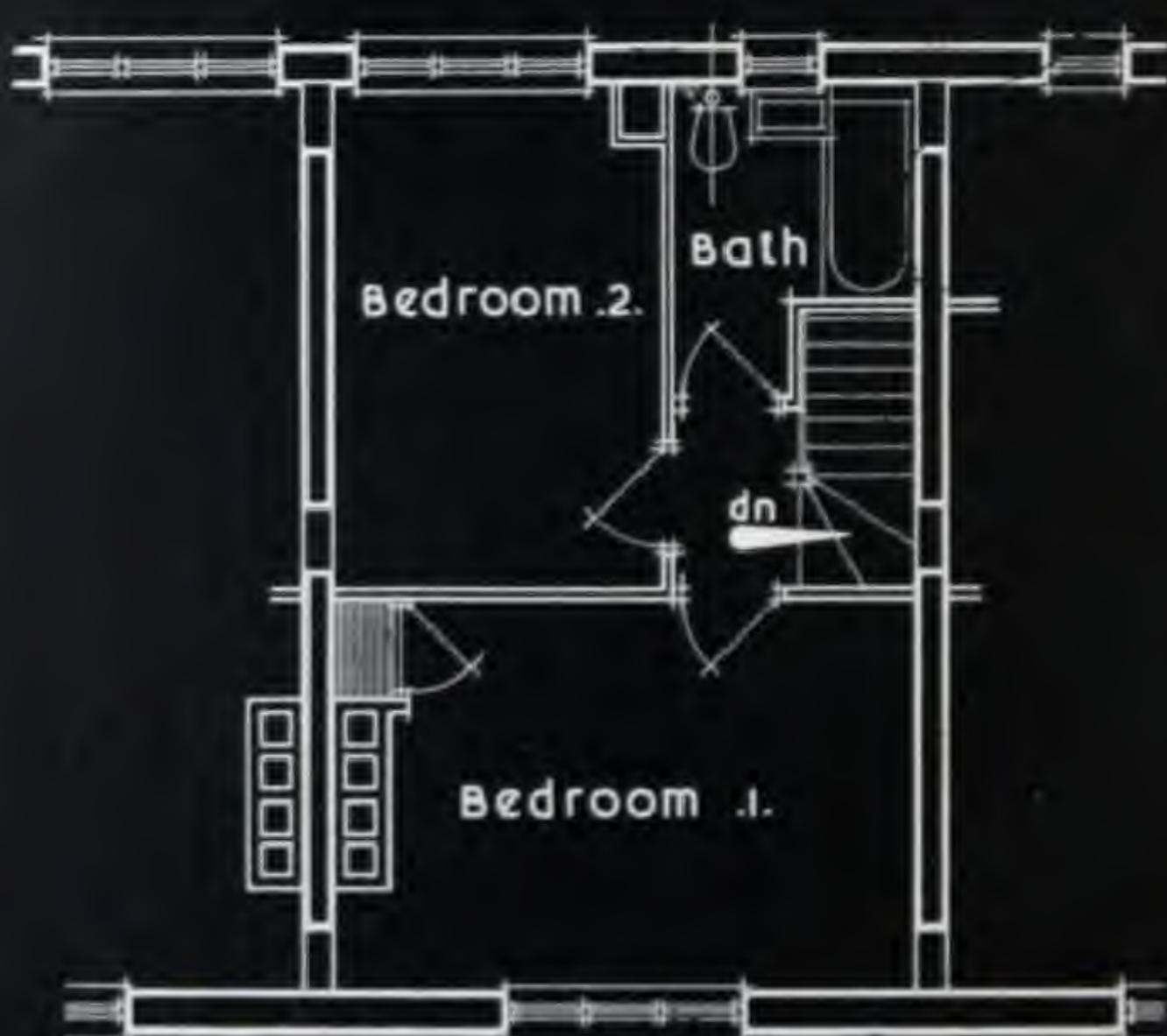
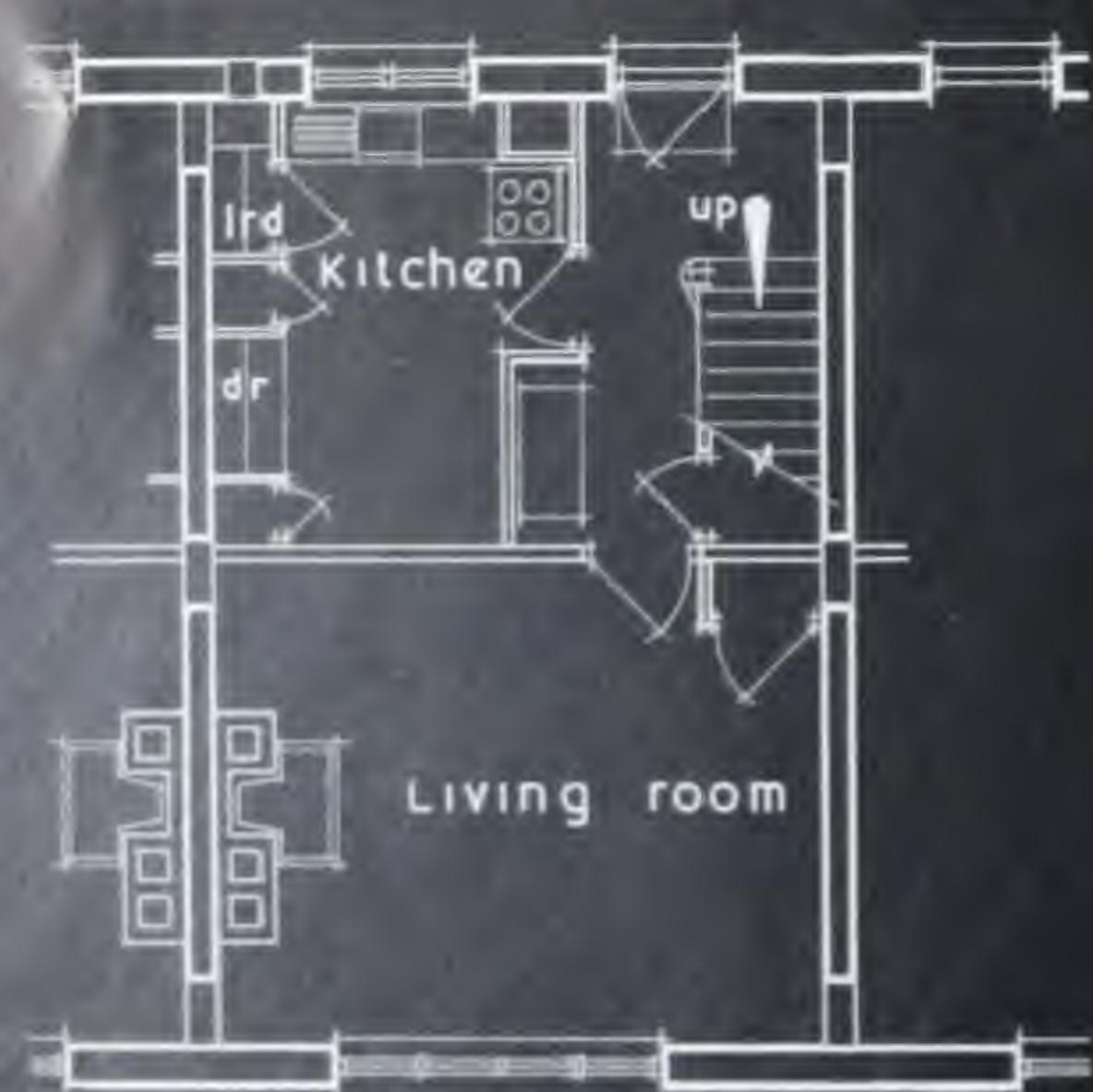
EIGHT-STOREY MAISONETTES TYPE 600



AYOUT PLAN OF BLOCK

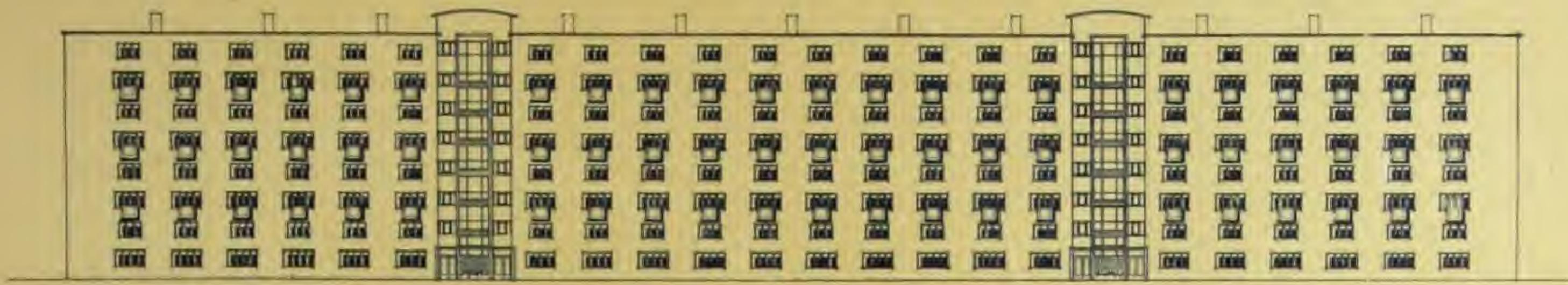
AREAS

Gross Area	- - -	700 f.s. inc. Fuel Store 14 f.s.
L.R.	- - -	180 f.s.
K.	- - -	88 f.s.
B.R.1	- - -	139 f.s.
B.R.2	- - -	110 f.s.

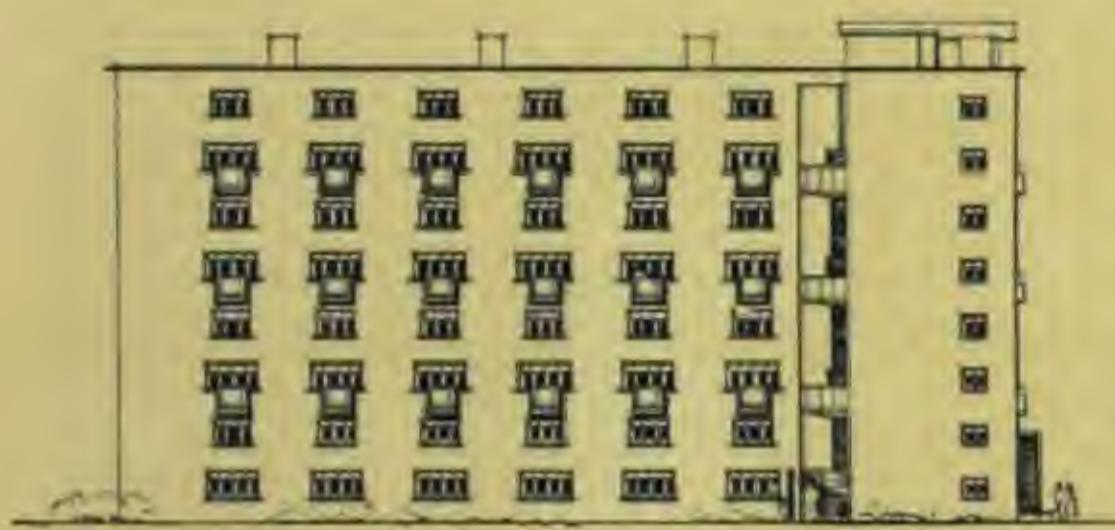


scale 1:100 feet

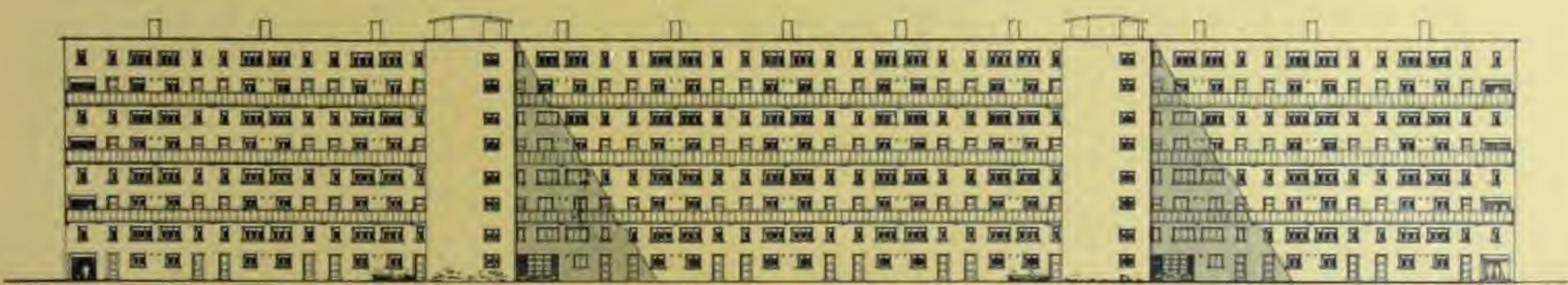
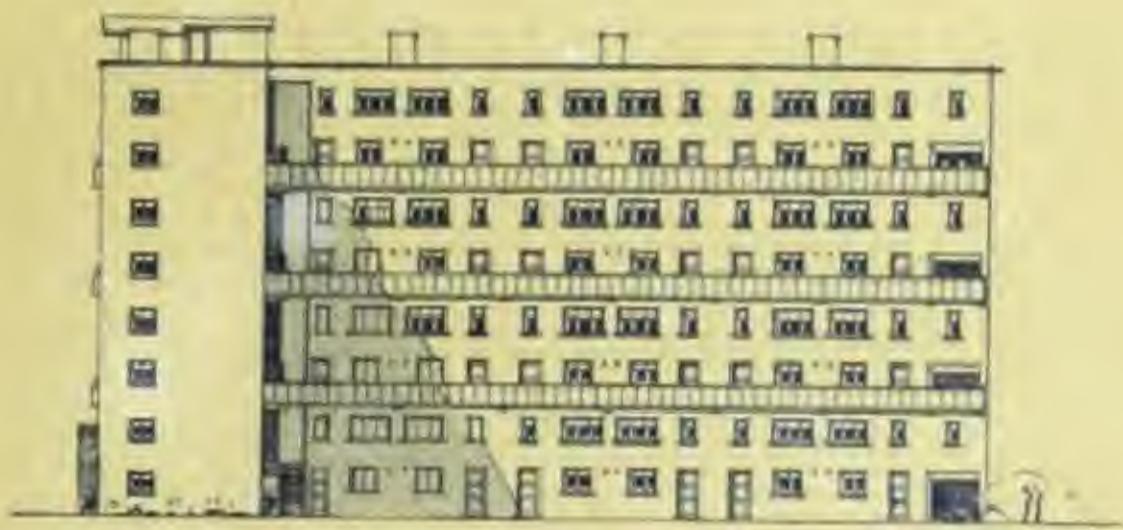
TYPICAL PLAN OF MAISONETTE SHOWING GROUND AND UPPER FLOOR



FRONT ELEVATION



SIDE ELEVATIONS

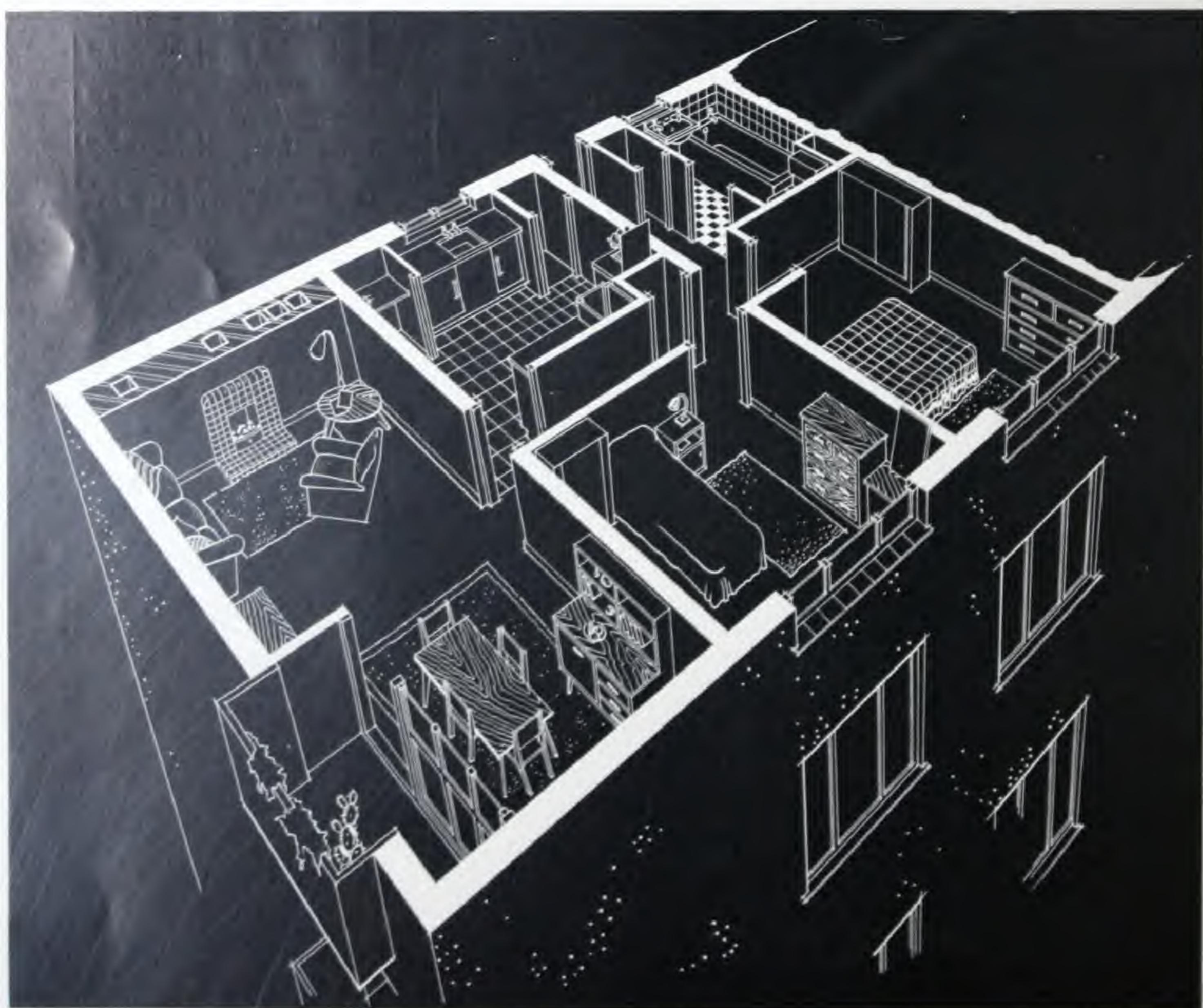


REAR ELEVATION

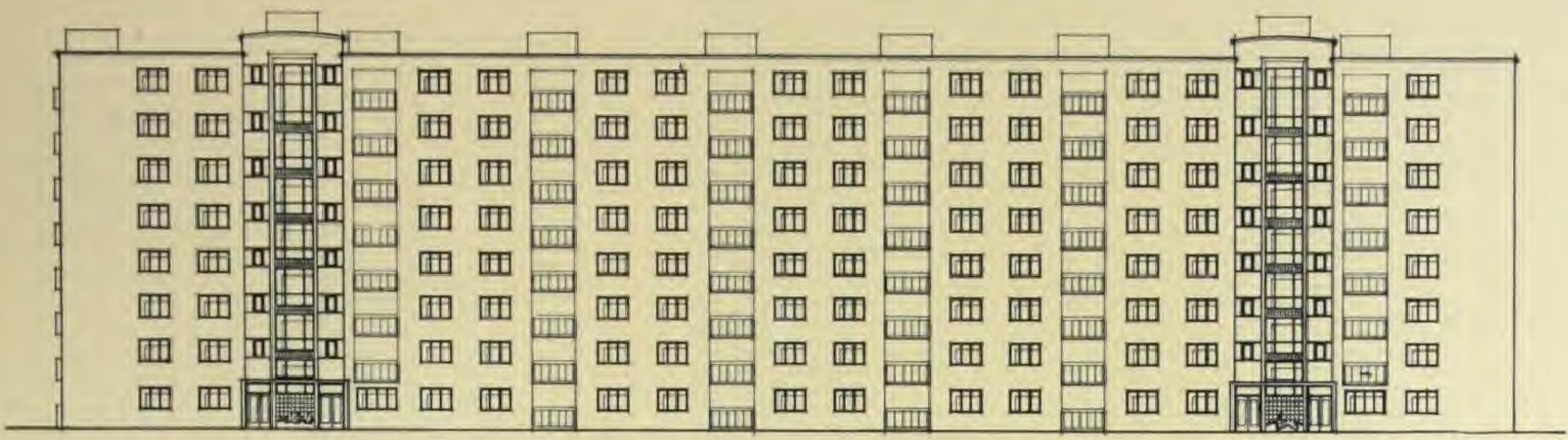
EIGHT-STOREY FLATS TYPE 601



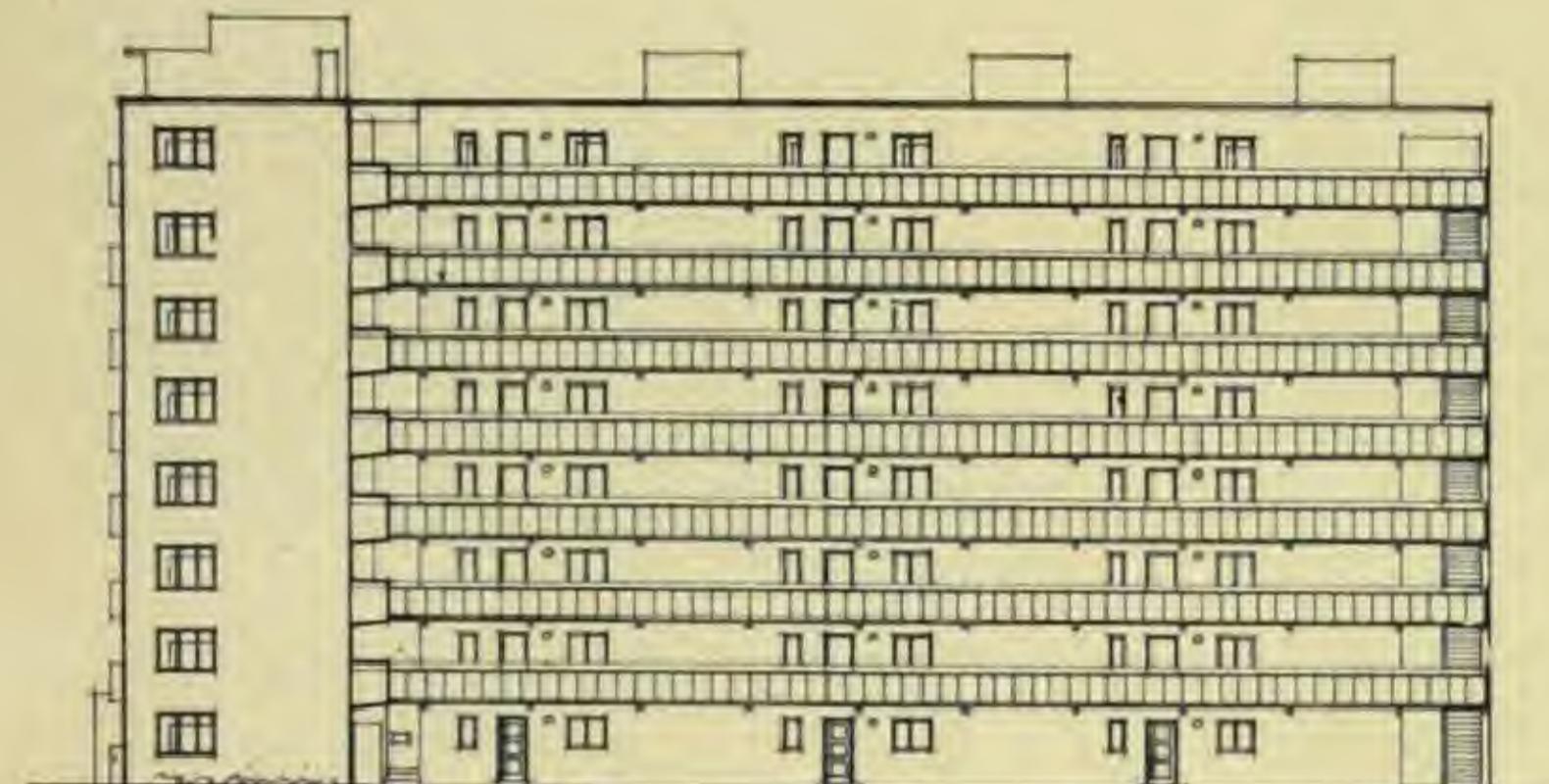
LAYOUT PLAN OF BLOCK



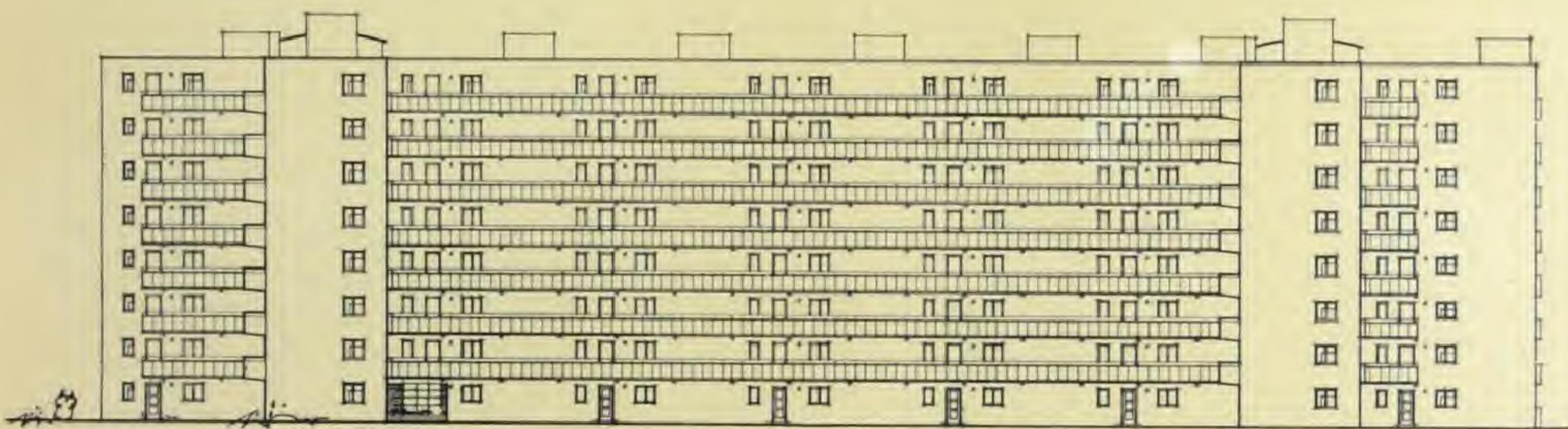
PERSPECTIVE SKETCH OF FLAT WITH WALLS CUT AWAY



FRONT ELEVATION



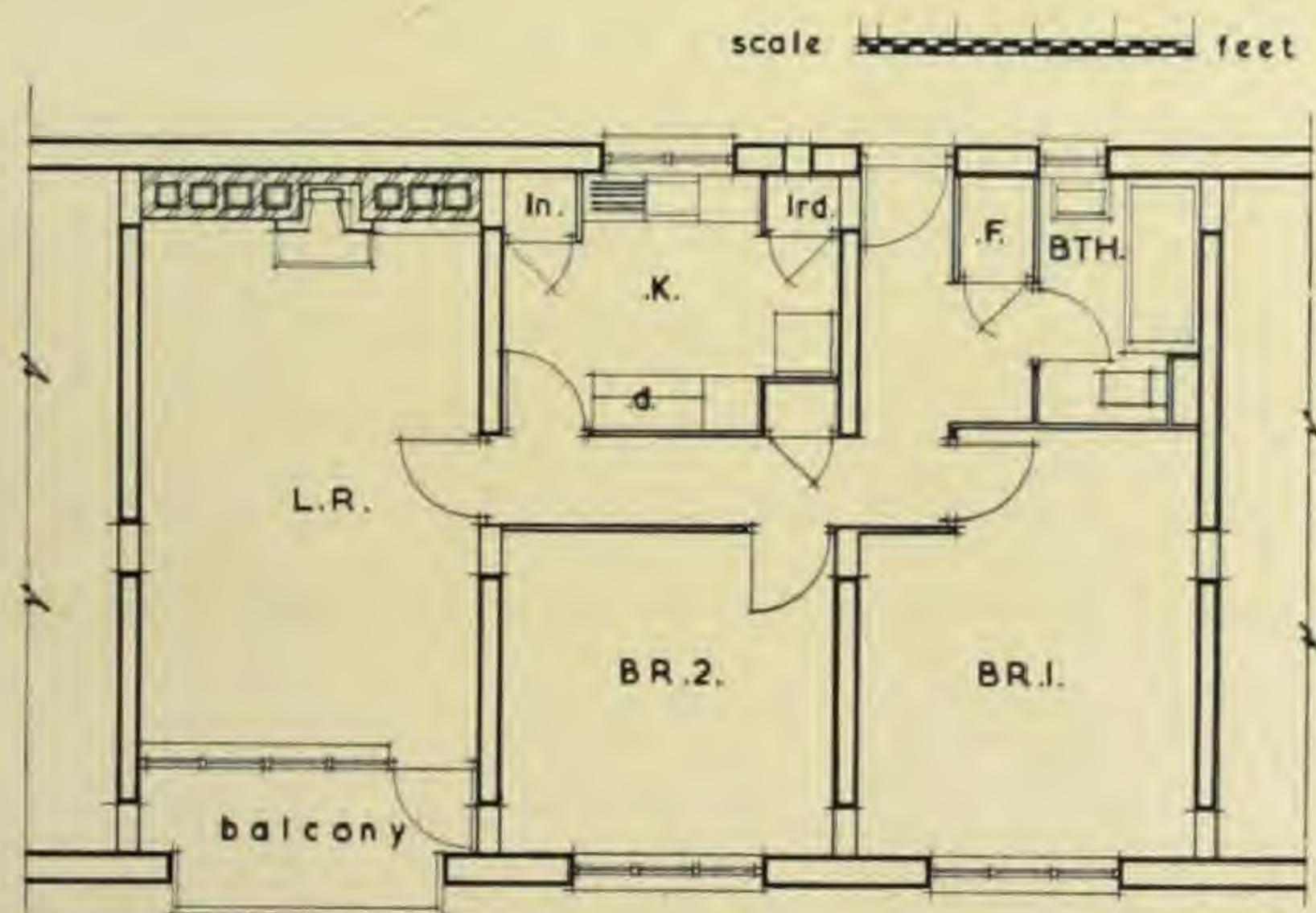
SIDE ELEVATION



REAR ELEVATION

AREAS

Gross Area - -	694 f.s. Plus Balcony 43 f.s.
L.R. - - -	180 f.s.
B.R.2 - - -	110 f.s.
B.R.1 - - -	135 f.s.
K. - - - -	80 f.s.



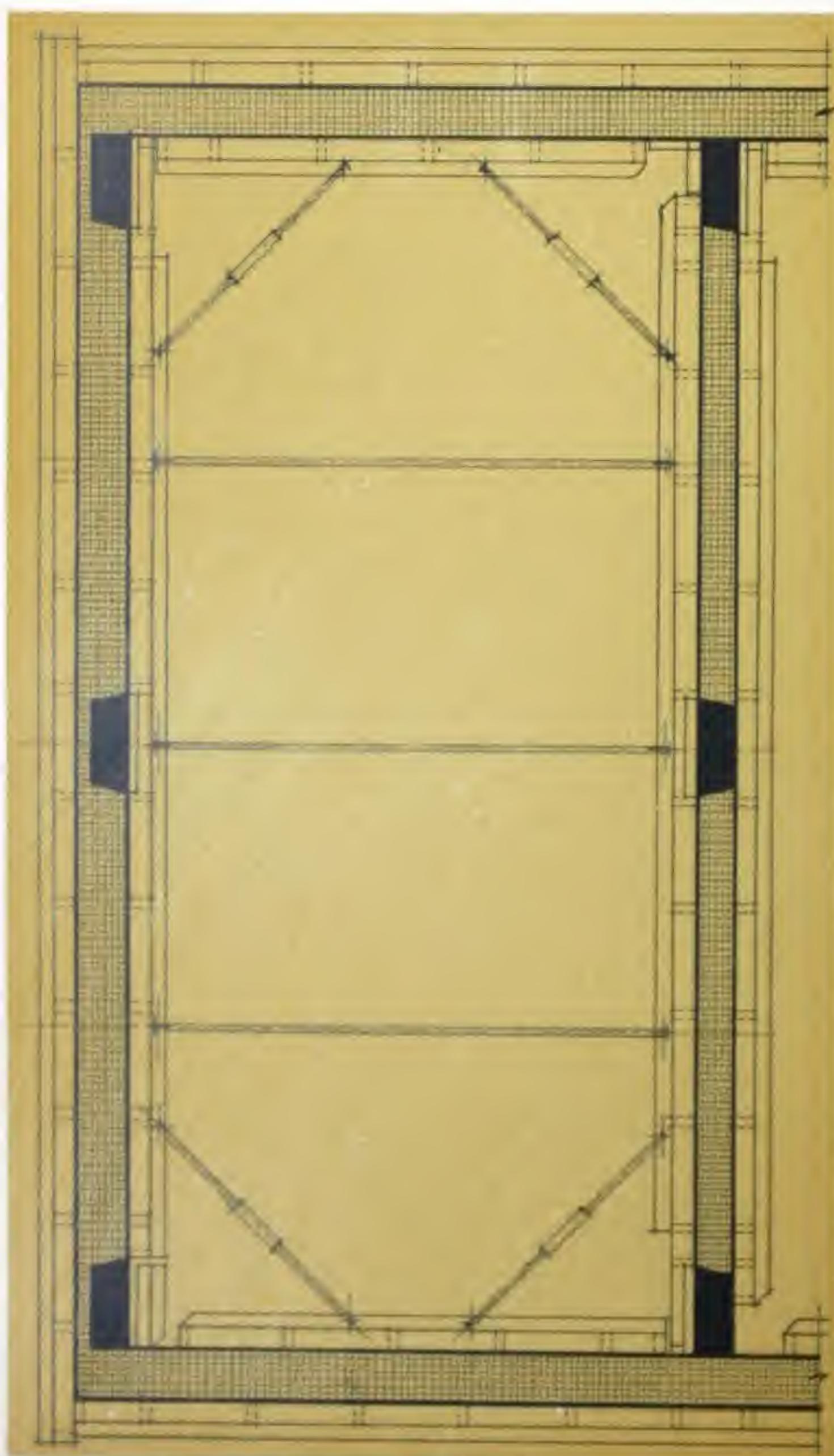
TYPICAL PLAN OF FLAT



Crane handles both shutter erection and pouring of concrete



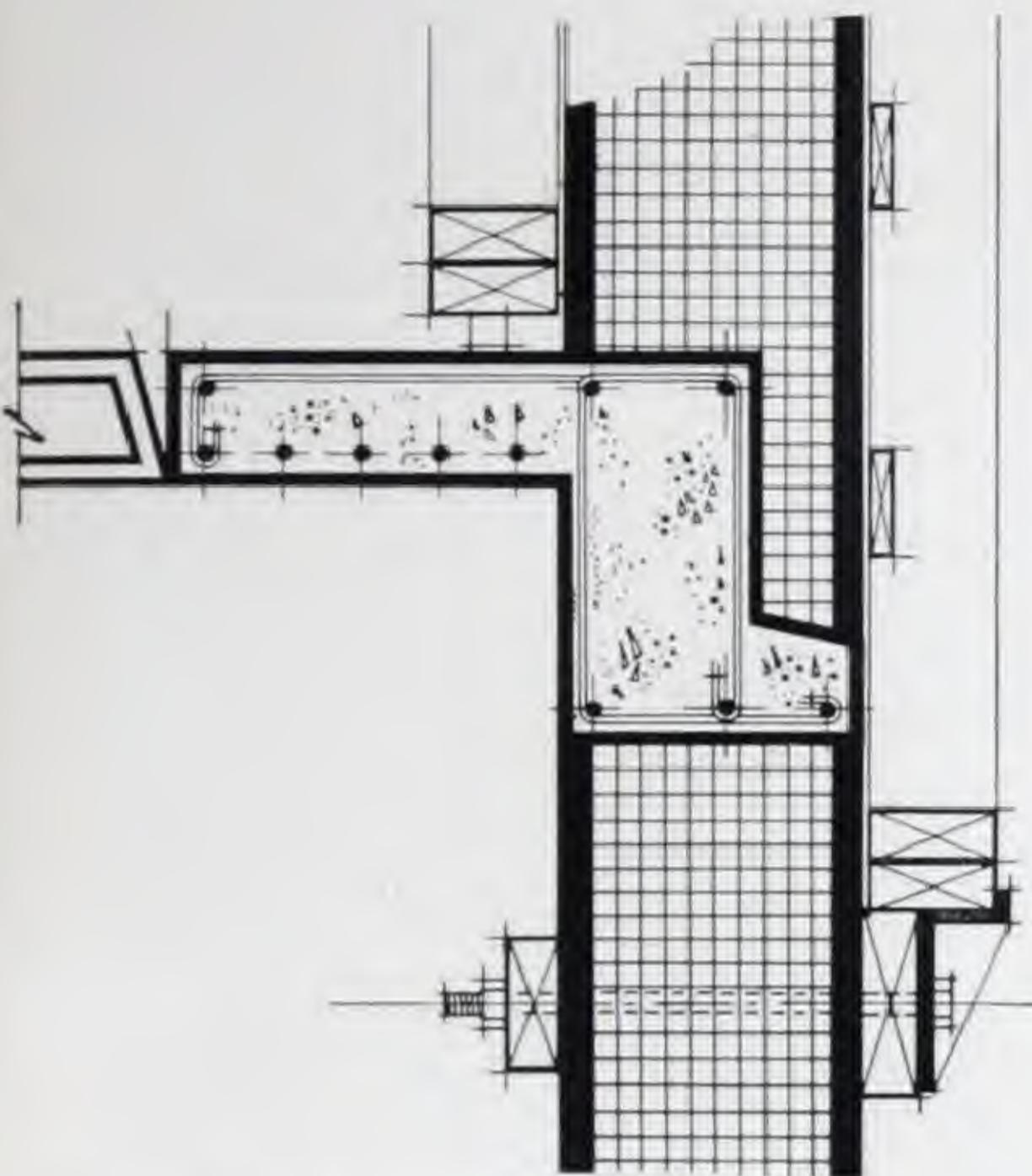
Windows with their necessary cores are fixed to the inner shutter, allowing the window to be built into the No-fines wall



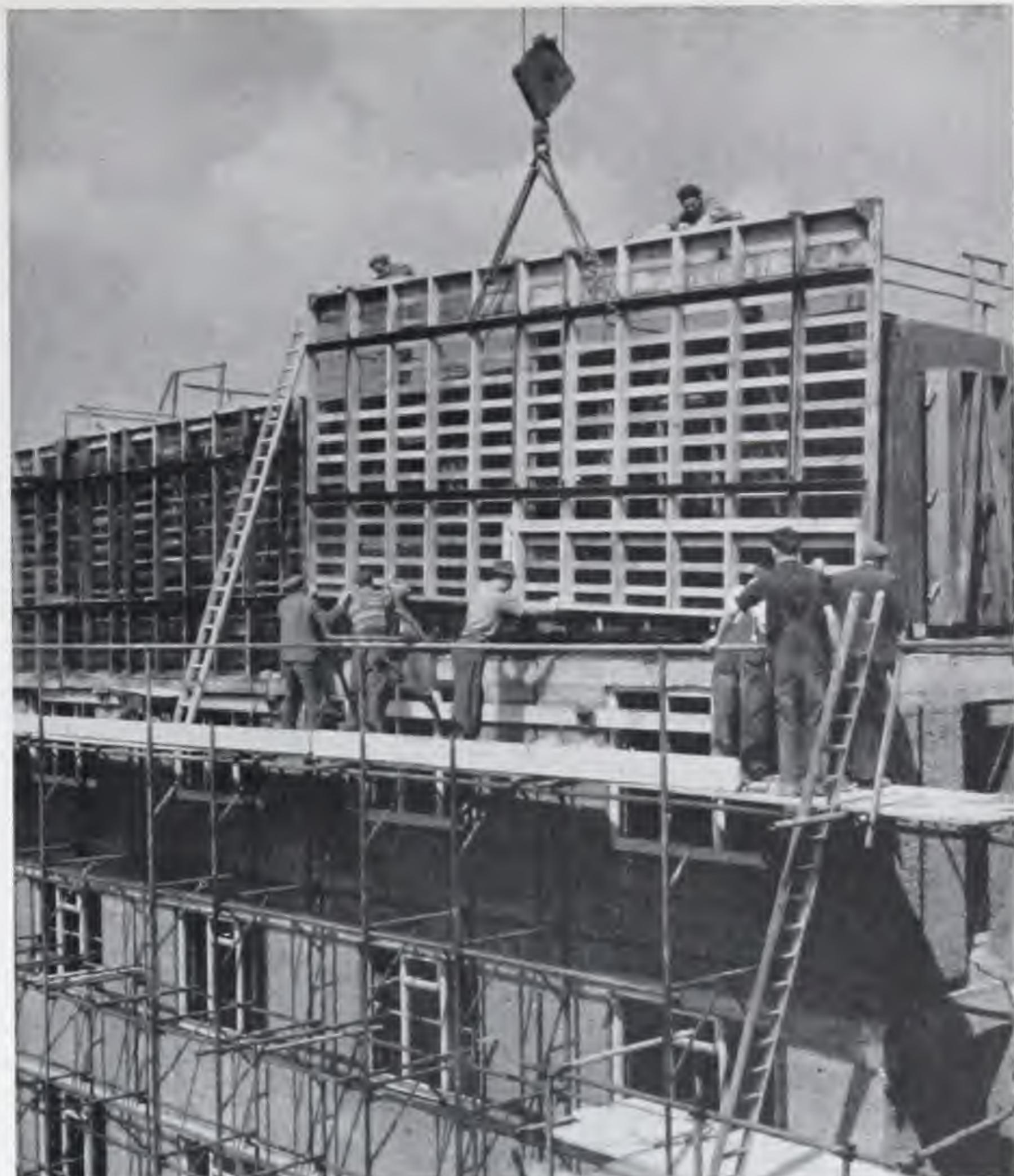
Plan of typical bay, showing column positions and general shutter arrangement



Photograph at top shows shutter unit being removed. Below, scaffold platforms designed as integral part of shuttering



Section through structural beam shaped as boot lintol. This beam has an applied D.P.C. forming weather check at each floor level



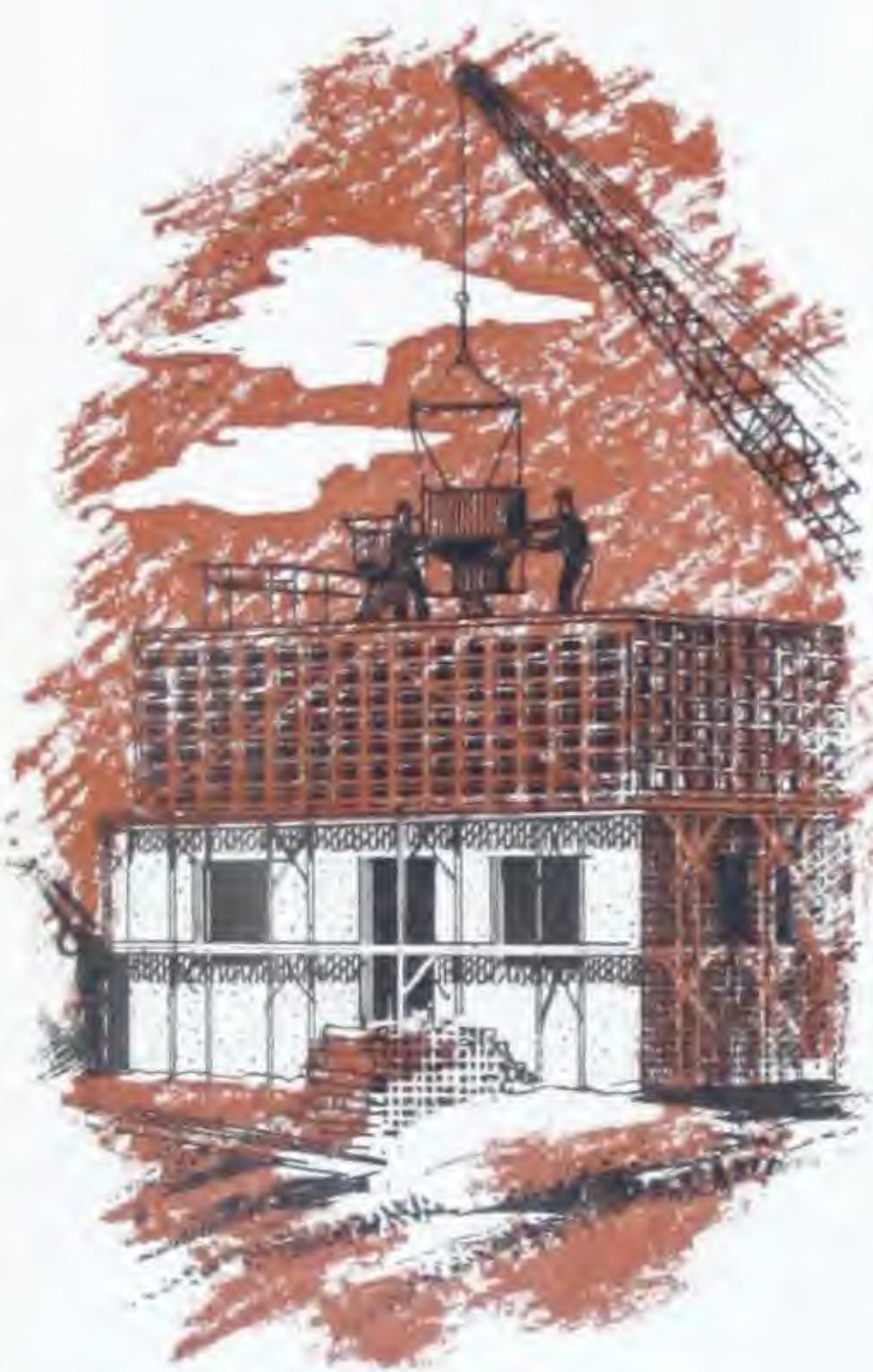
Photograph above shows placing of outer shutter

TECHNICAL DATA

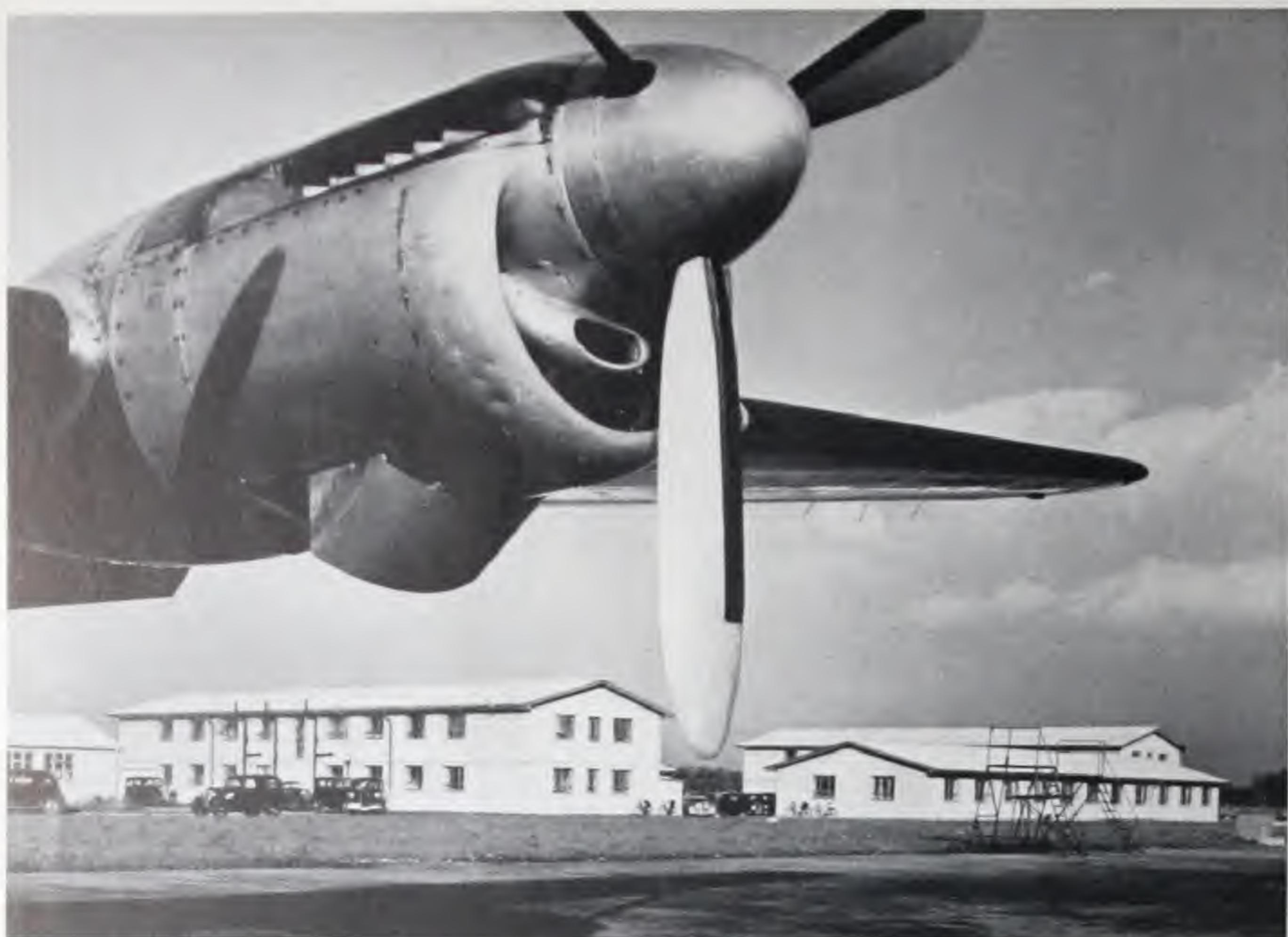
No-fines concrete mix consists of 1 cwt. cement to 10 cubic feet of aggregate (approx. 1:8 by volume), all as recommended in Post-War Building Studies No. 1. The type of aggregate will vary with the district, that at present being used is washed river ballast to pass a $\frac{3}{4}$ -in. sieve with not more than 10 per cent passing a $\frac{3}{8}$ -in. sieve. Increased thermal insulation could be obtained by the use of clinker or crushed brick, but the difficulty remains of ensuring that such material is inert. R value is 0.19, thus a 12-in. No-fines wall rendered externally and plastered internally has a U value of approx. 0.30, being equivalent to 11-in. cavity brickwork.

IN MEETING THE PROBLEMS INVOLVED IN THE BUILDING

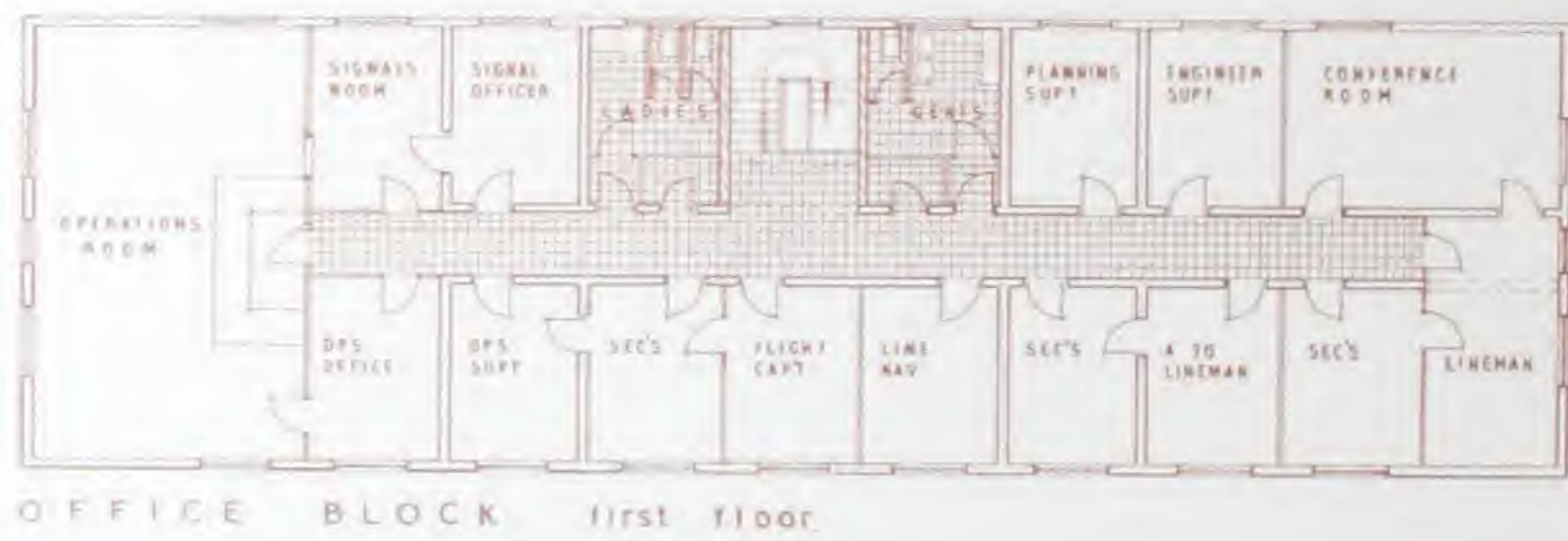
of various types of offices and stores, two distinct methods of approach are used. Where the required accommodation has an inherent module, we are able to make a four-sided box shutter and repeat it. This is, of course, the obvious and practicable means where internal partitions are suitably spaced. The second method is applied to large floor spaces such as are necessary in canteens, warehouses, etc, and is what is commonly known as the 'post and panel' method. Concrete posts are spaced out at the required intervals and the panelled in-filling is of No-fines concrete. In the construction of two- or three-storey accommodation the box-shutter method is used, single storeys being poured at a time. This was done with the offices at London Airport and Cwmbran. The administrative offices of the Cwmbran Development Corporation were completed in six months. The external No-fines walls are finished with cement render and Derbyshire spar, and internal walls are plaster finished. This section of the brochure serves to illustrate the fact that the No-fines method of construction may be utilized in the erection of all types of accommodation.



**OFFICES
STORES**



Group of Office Blocks
at Cranford Lane



Pouring of No-fines to first floor
on one of the two-storey buildings

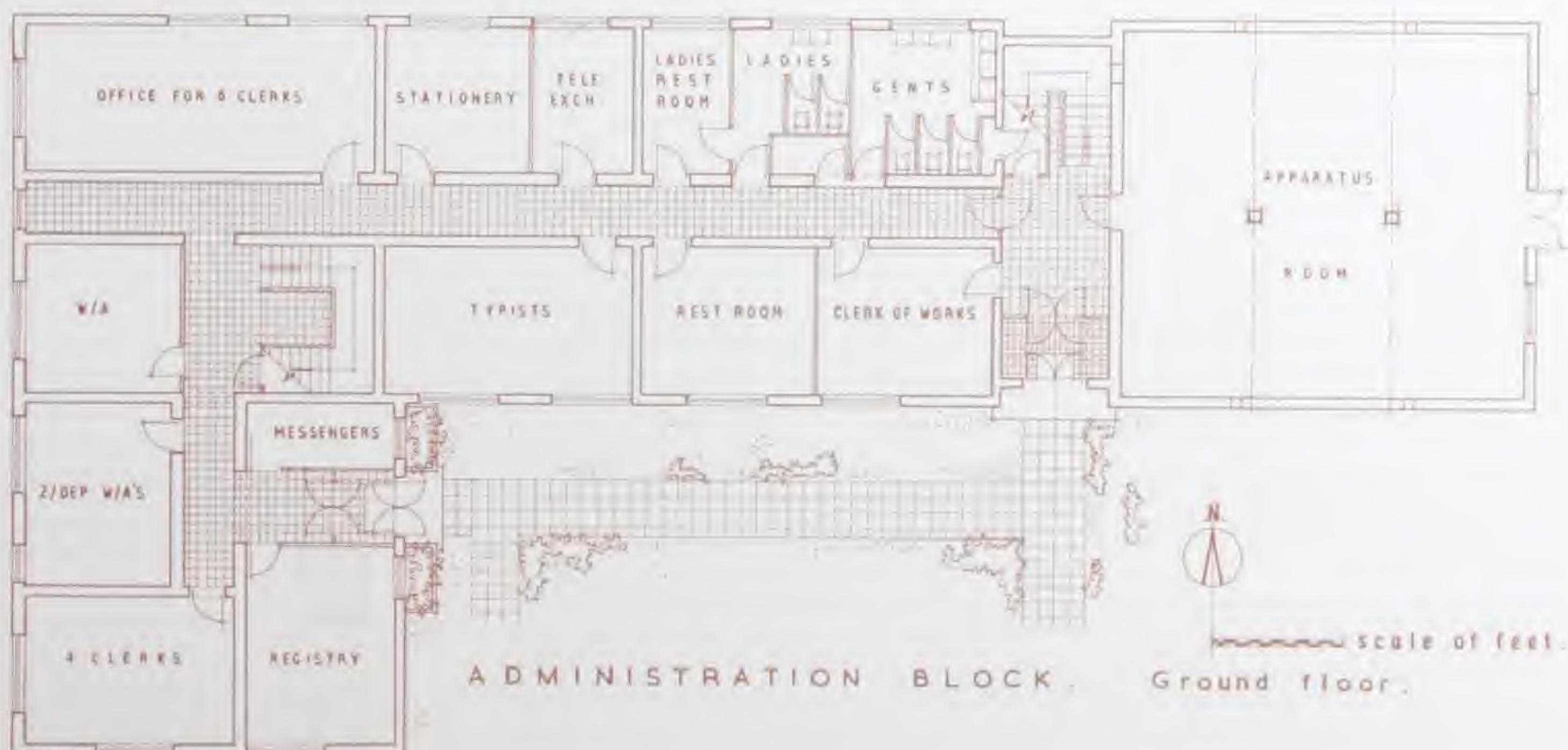


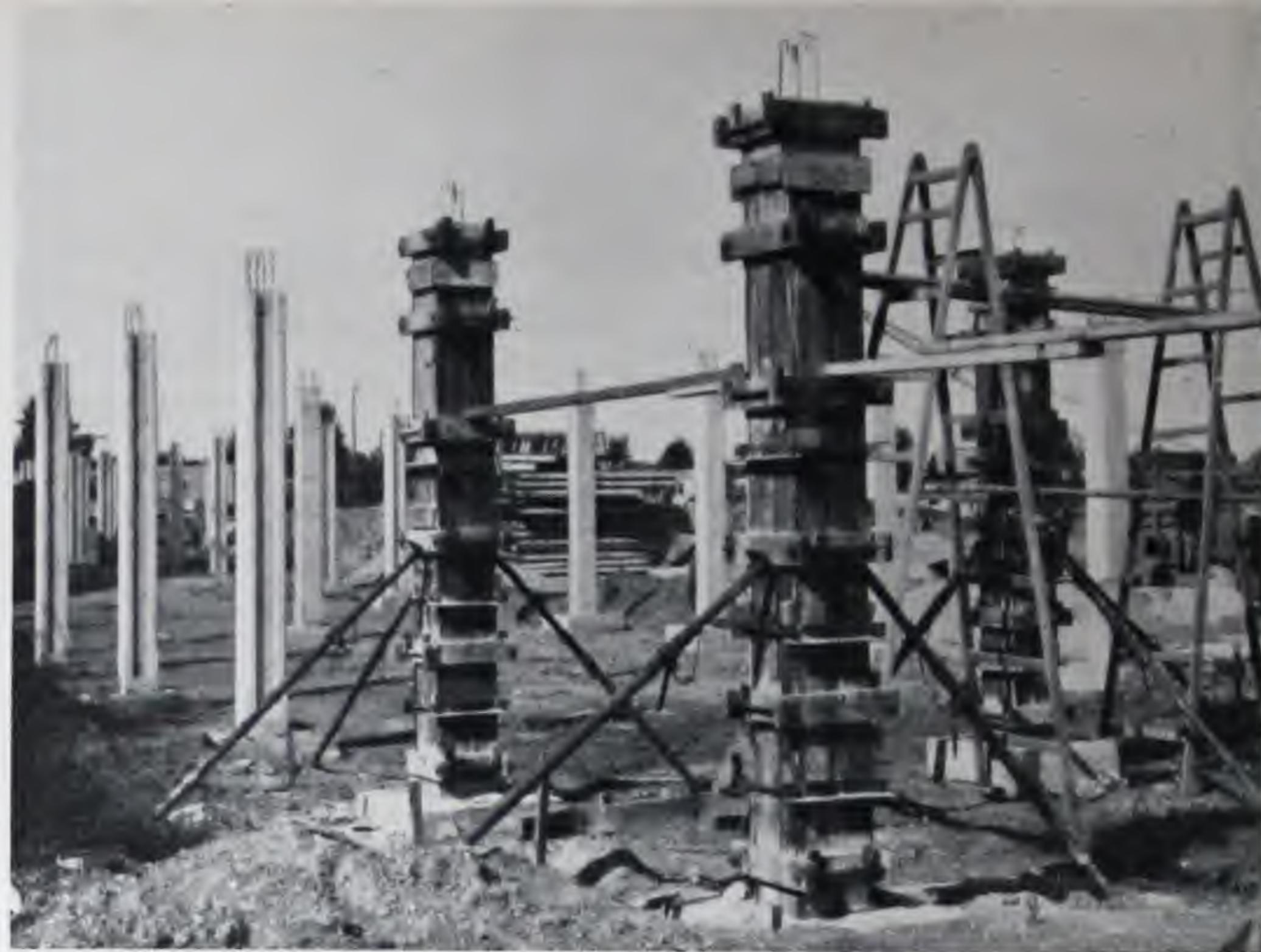
Administration buildings built at
Harlington Corner



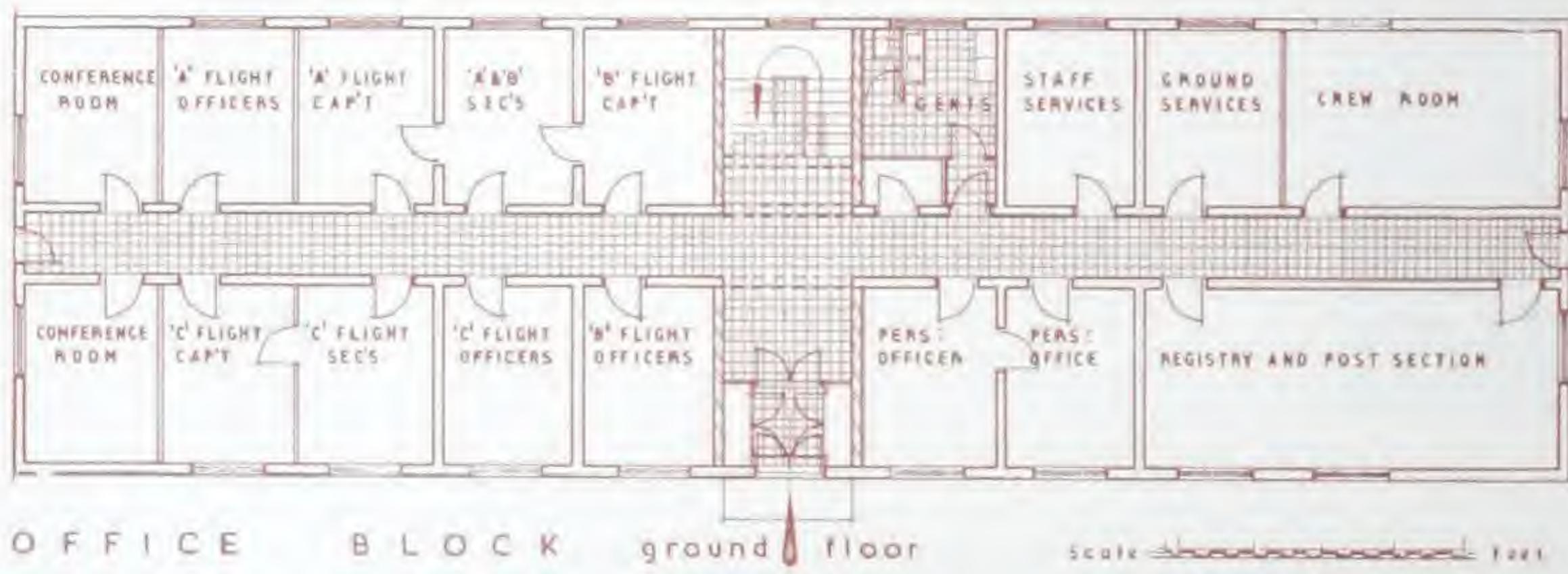
LONDON AIRPORT

The photographs and plans on these six pages illustrate a few of the offices and other Administration Buildings erected in No-fines concrete at London Airport, for the construction of which Wimpeys were the main contractors. The finished designs of the buildings (which, in addition to Offices, comprise Garages, Catering Blocks, Workshops, and Link Trainer Blocks) were prepared from sketch plans submitted by the Air Ministry.

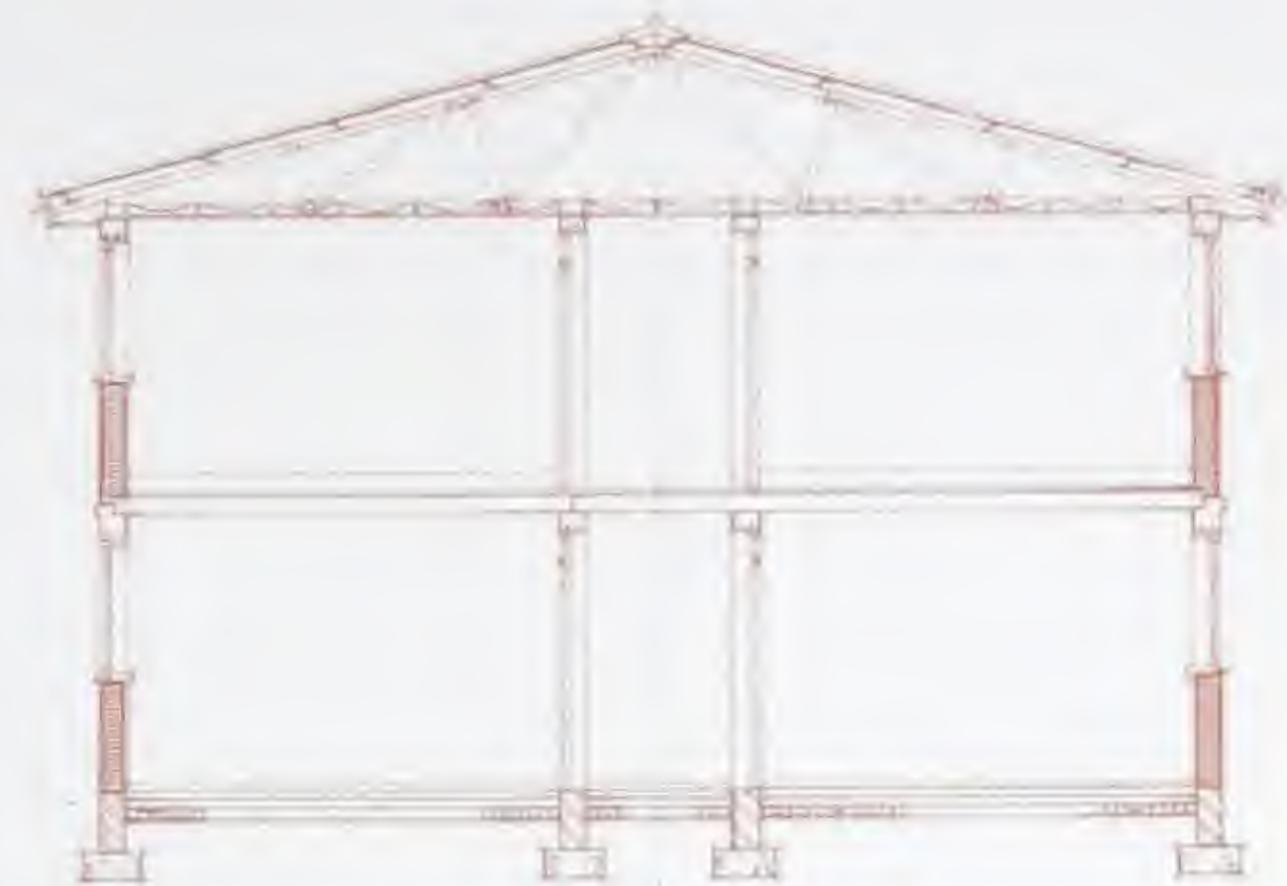




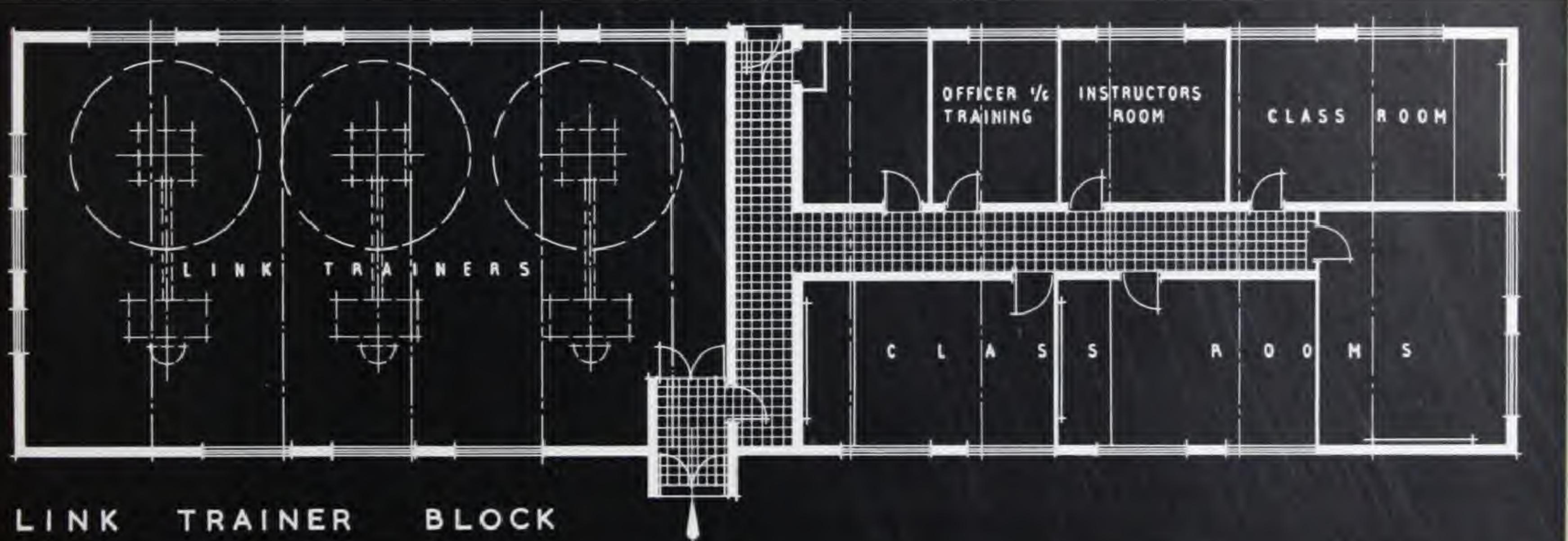
Photograph above shows the shuttering for R.C. columns, used in the No-fines post and panel system of construction. The interior (top left) is of a staircase in one of the Administration Buildings



This photograph is of the Catering Block at the Airport

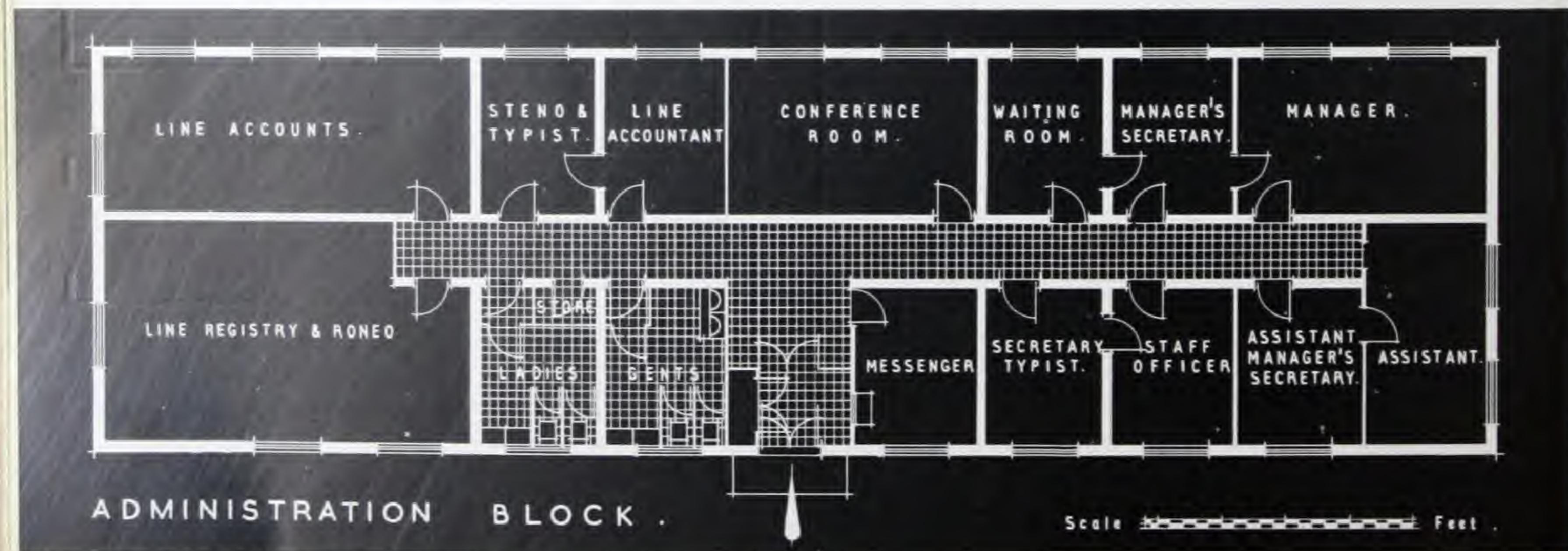


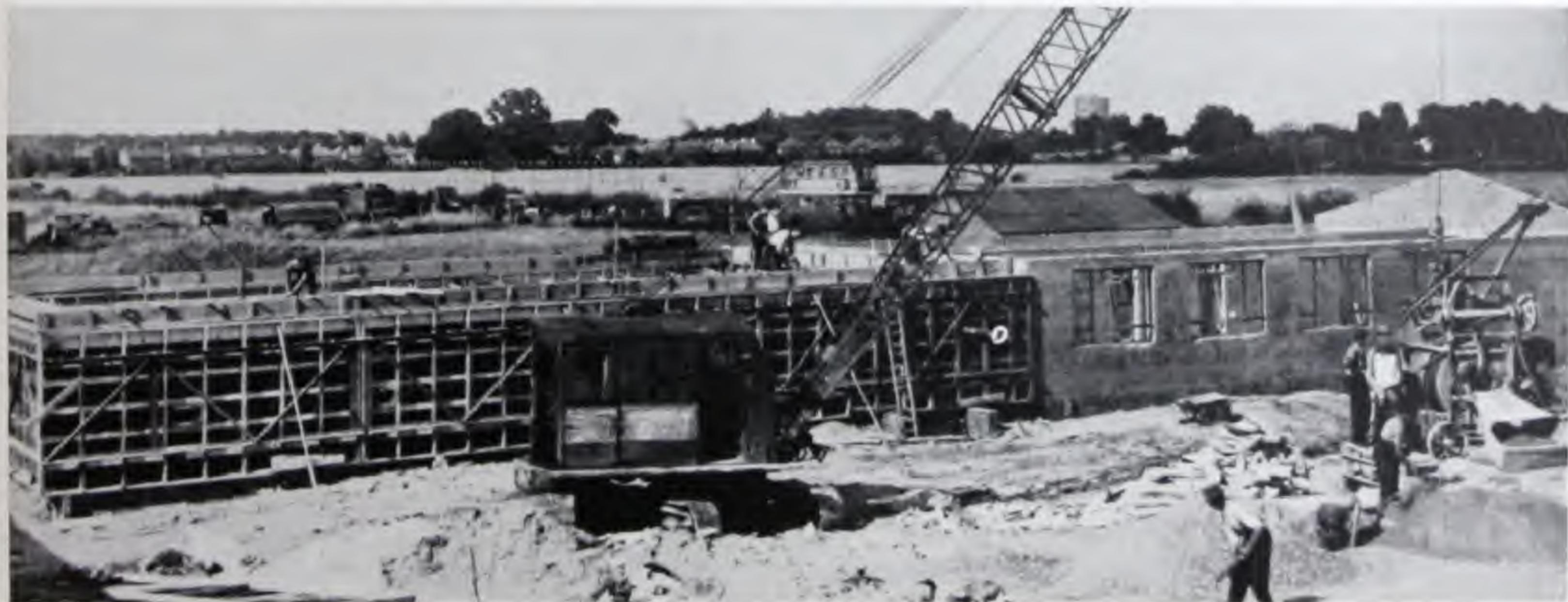
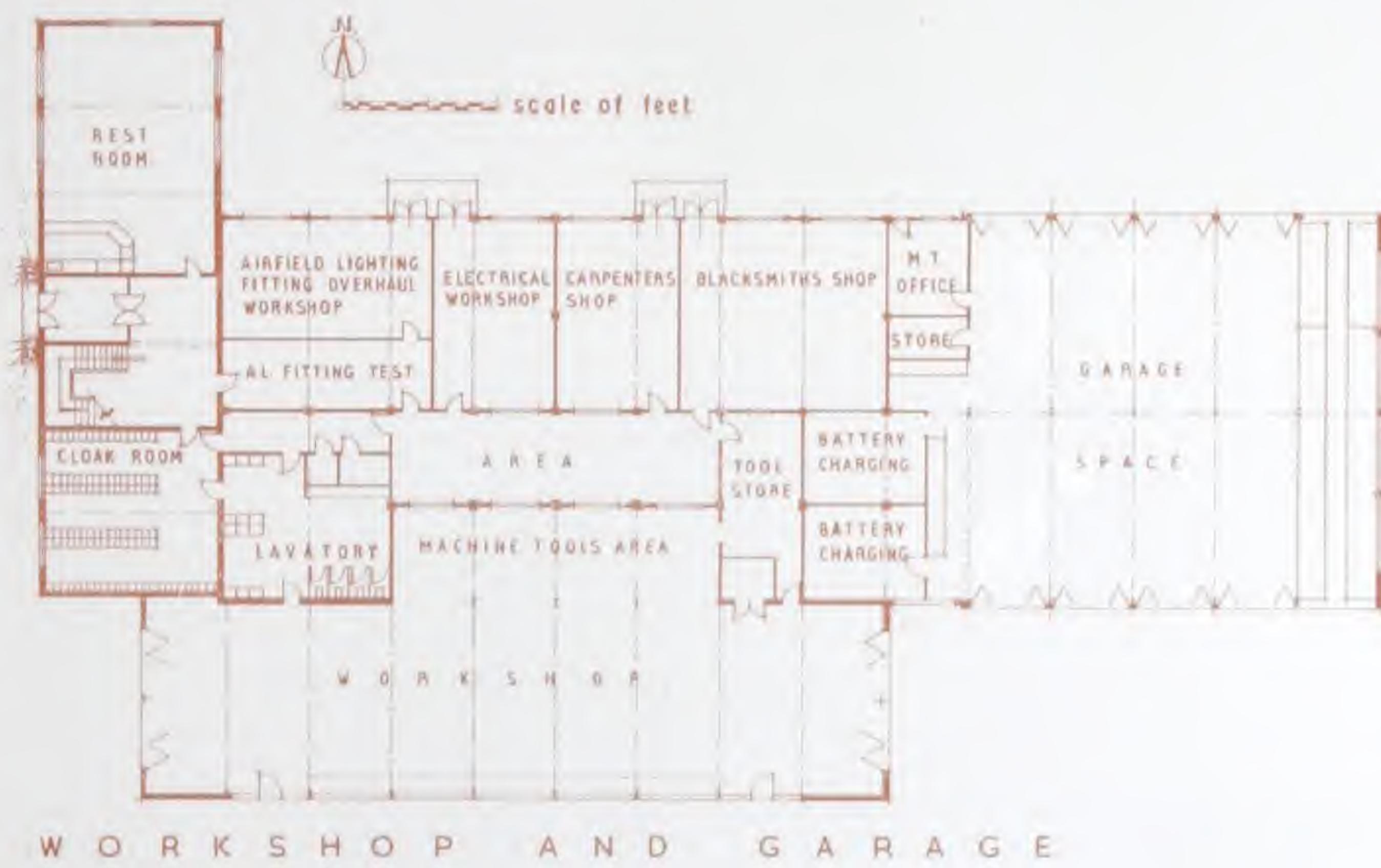
Top right can be seen a typical section through a two-storey building with central passage. The photograph on this page shows the entrance treatment to the Catering building





Front elevation of
Workshop and Garages

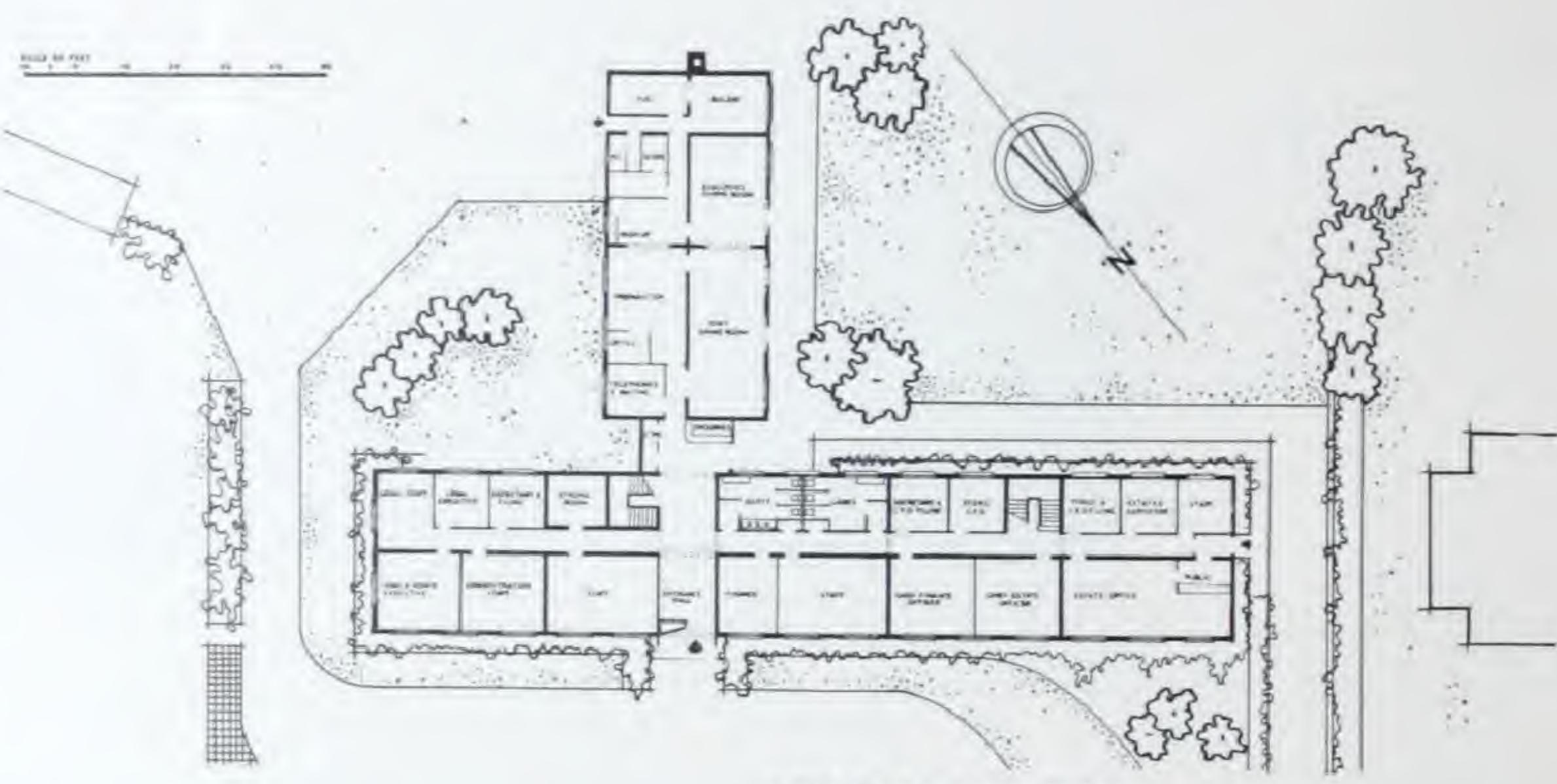






COUNCIL OFFICES CWMBRAN

The photographs on these pages are of the administration offices built for the Cwmbran Development Corporation. The external No-fines walls are finished with cement render and Derbyshire spar. Internal partitions are of 2-inch clay block plaster finished. Precast hollow beams, plastered on the underside, have been used for the first floor, and the ceiling is of timber noggings, at 2-foot centres between trusses, to carry plasterboard. The main entrance has glazed metal-faced doors in a mahogany frame with a large side-light over a Portland stone flower box, producing a most pleasing effect. The floor to the hall is paved with heather quarry tiles and the remainder with the thermoplastic type. This building again proves that the blending of good design with this method of construction really shows results. The offices were occupied within six months of the commencement of job.



GROUND FLOOR PLAN



Front elevation and
main entrance feature





Above: Main entrance hall with reception desk
Right: Dining-room

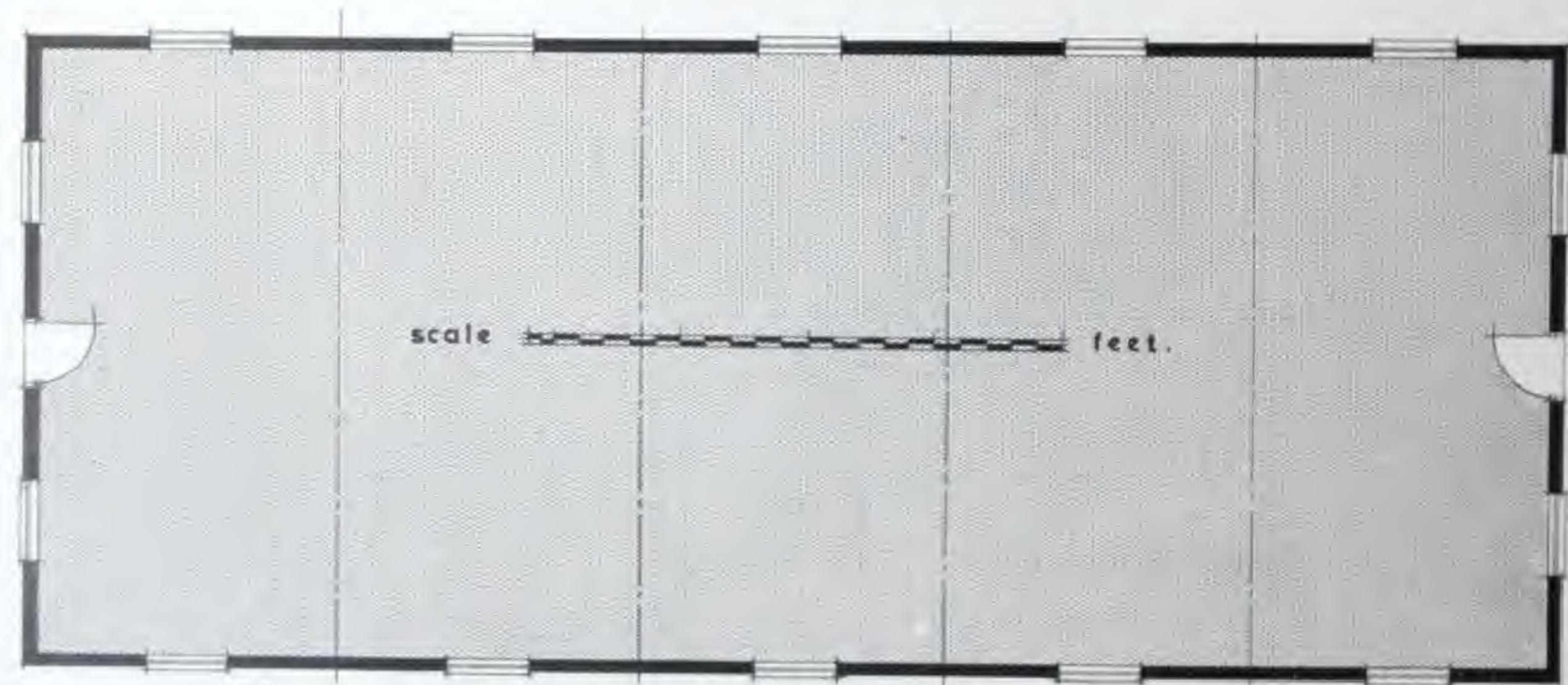


Architect to Cwmbran D.C.: J. C. P. West A.R.I.B.A., A.M.T.P.I.

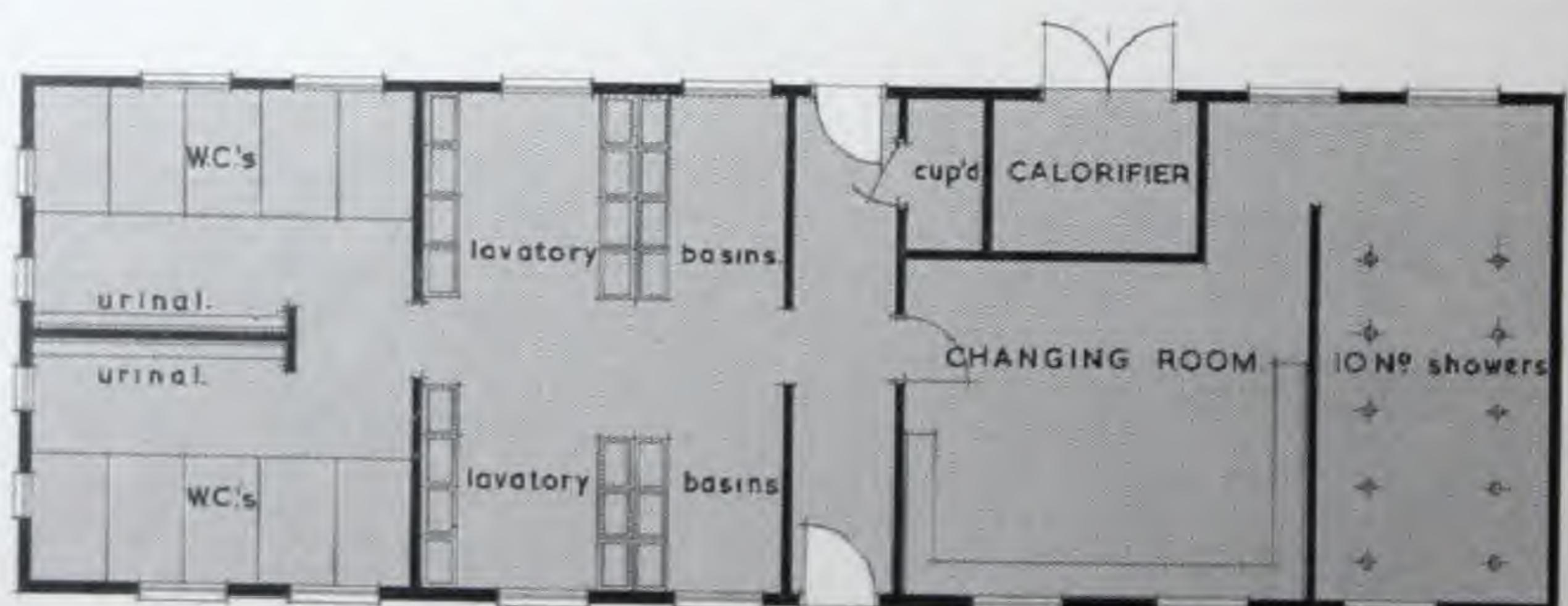


Photograph taken at rear of building

NO - PINES STANDARD HUTTING

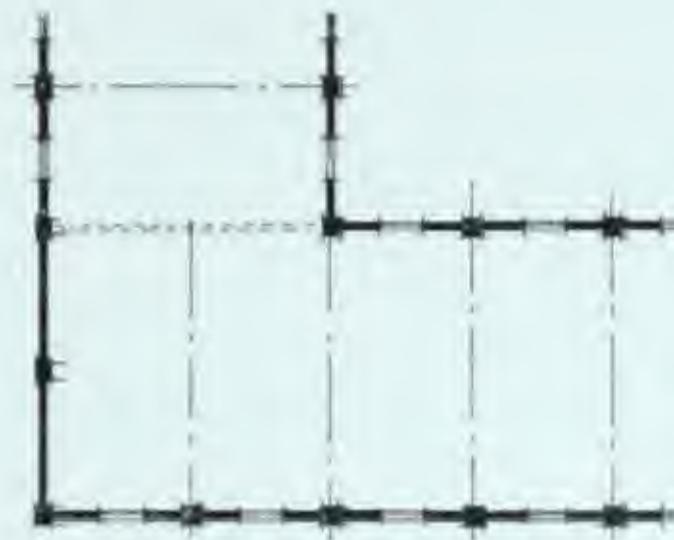
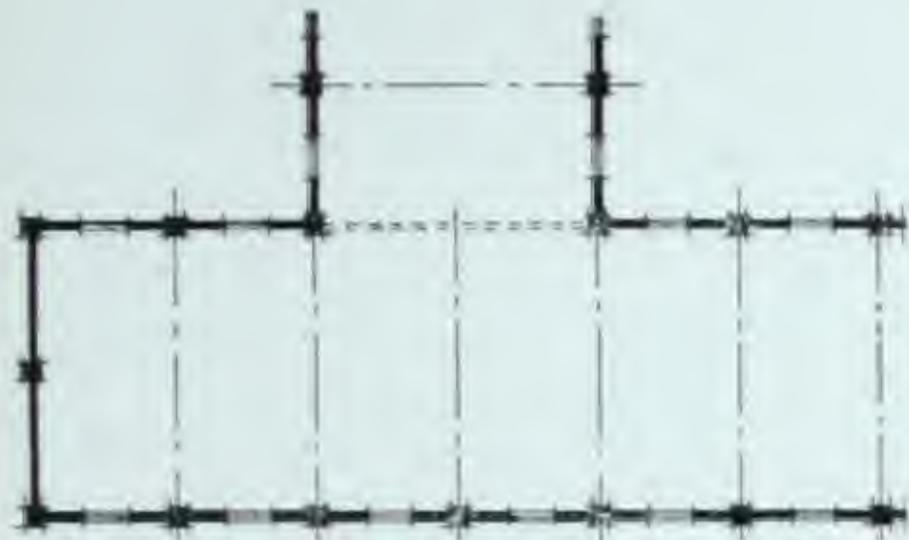


PLAN SHOWS 60' 0" HUTTING. 20' 0" OR 24' 0" SPANS 8' 0" HIGH. ALSO DESIGNED IN CONTINUOUS LENGTHS

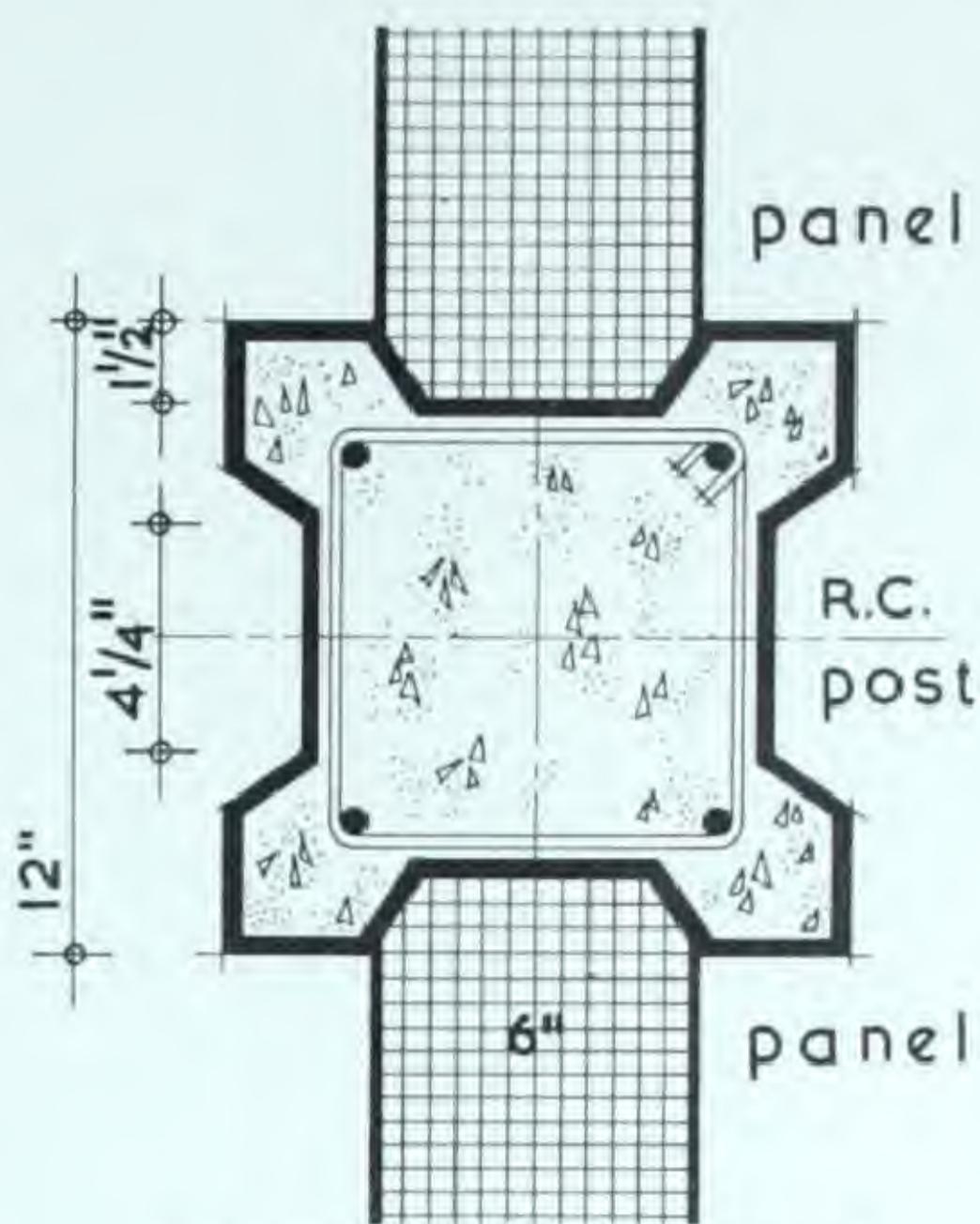


PLAN SHOWS STANDARD HUT AS ABLUTIONS BLOCK

POST & PANEL CONSTRUCTION



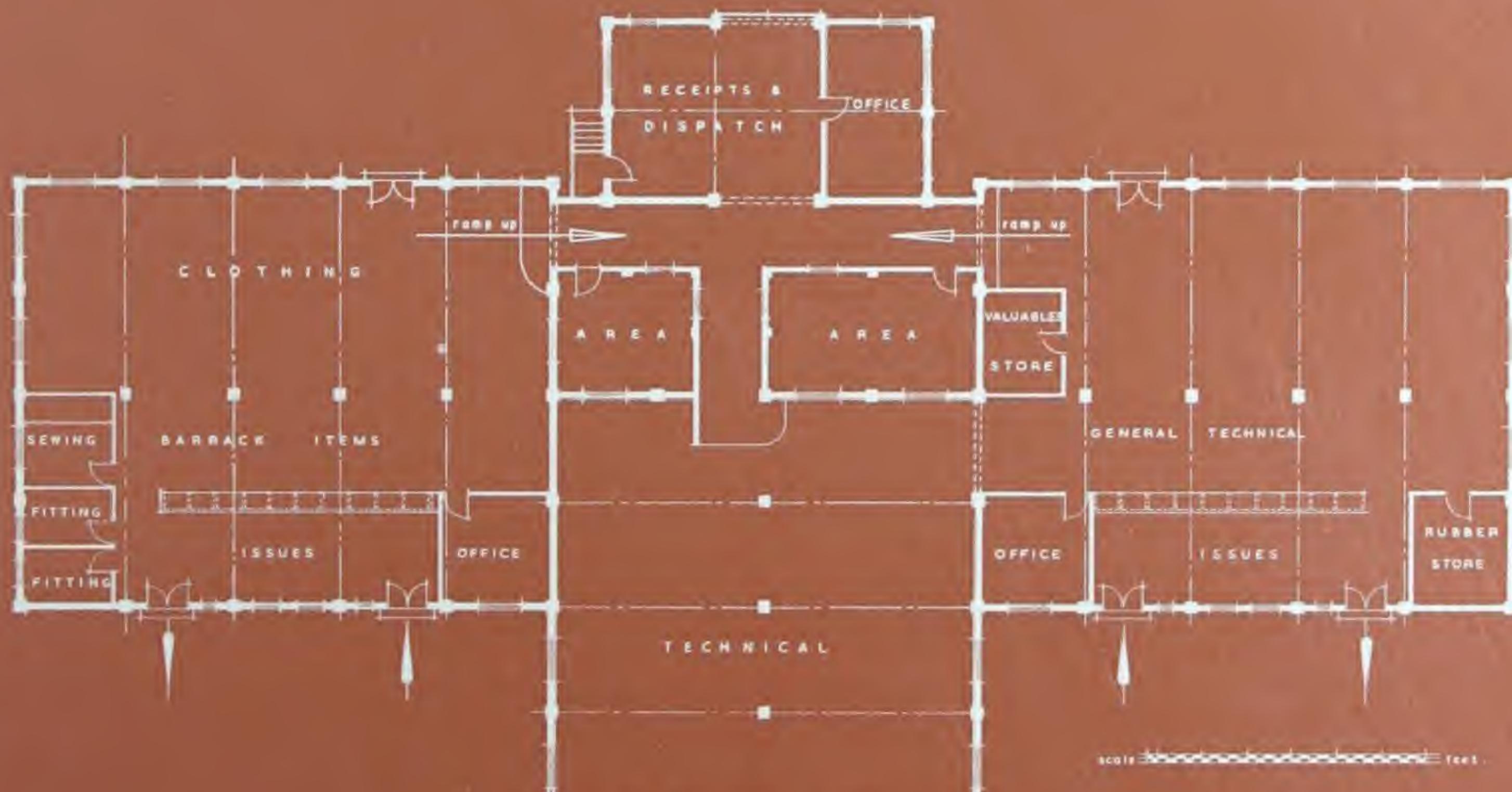
DIAGRAMS ABOVE SHOW T AND L JUNCTIONS FOR HUTTING.
BUILT IN SPANS OF 20' 0" AND 24' 0" OR MULTIPLES.



PLAN THRO R.C. POST SHOWING
NO-FINES CONCRETE ABUTTING SAME.

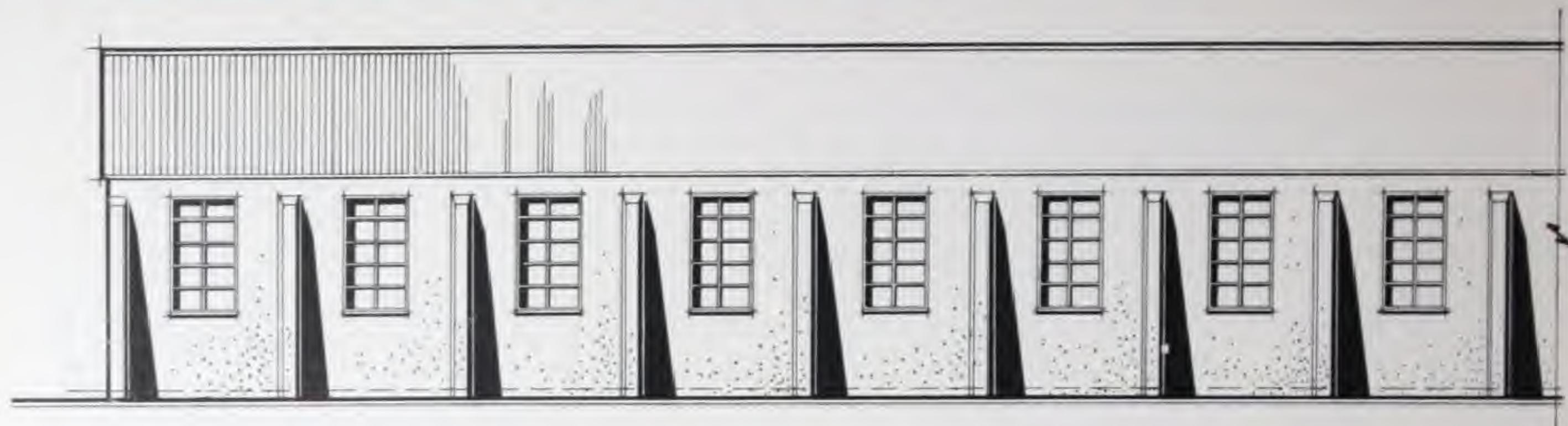


F R O N T E L E V A T I O N .

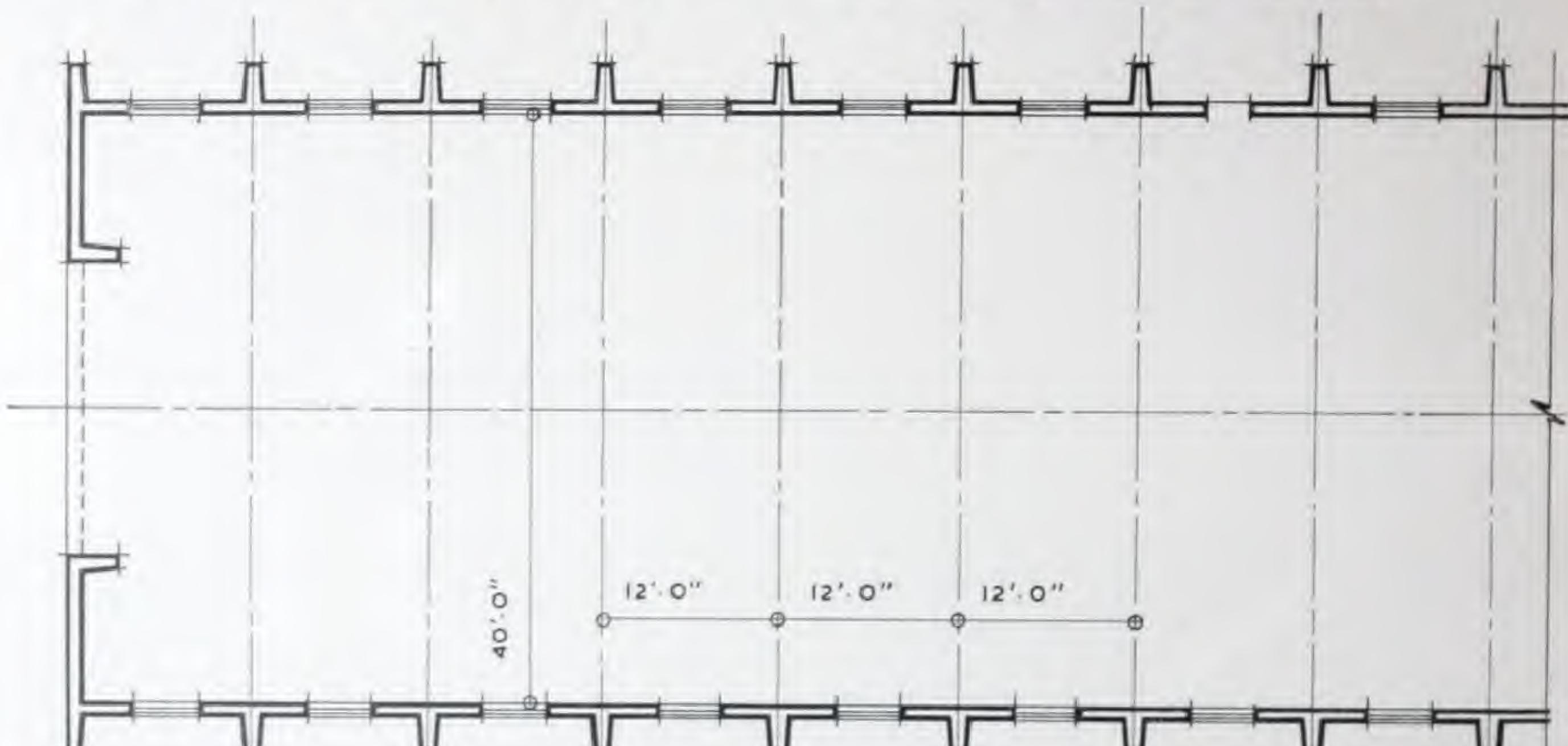


M A I N E Q U I P M E N T S T O R E .

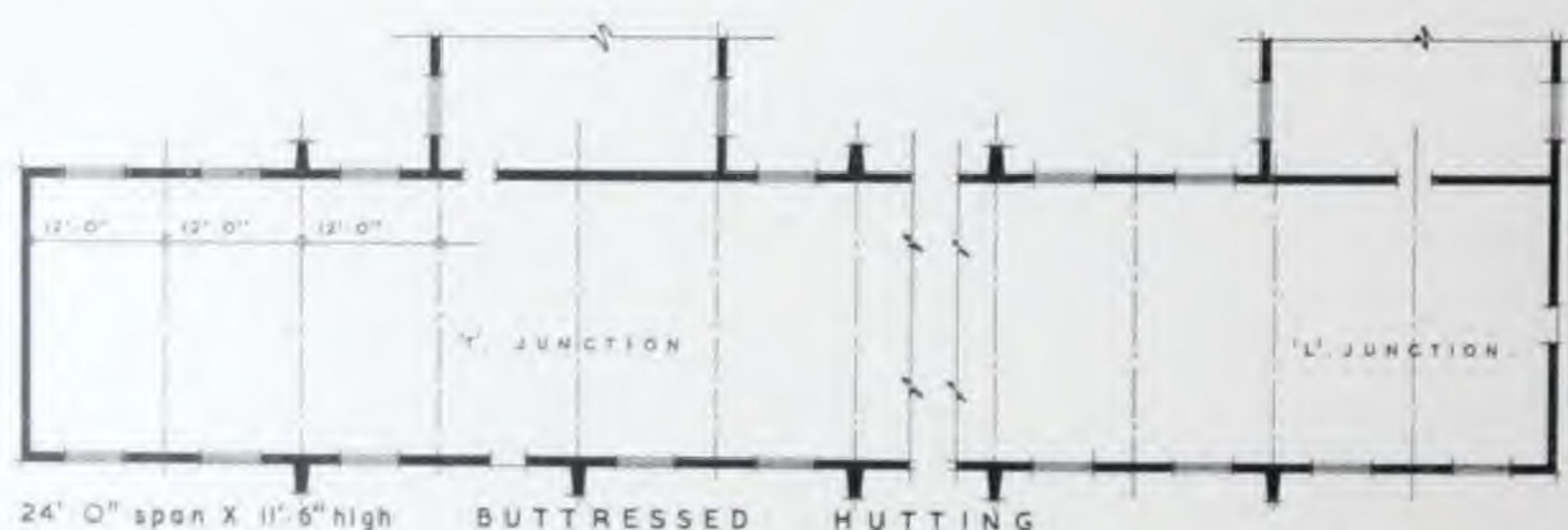
STORAGE BUILDINGS



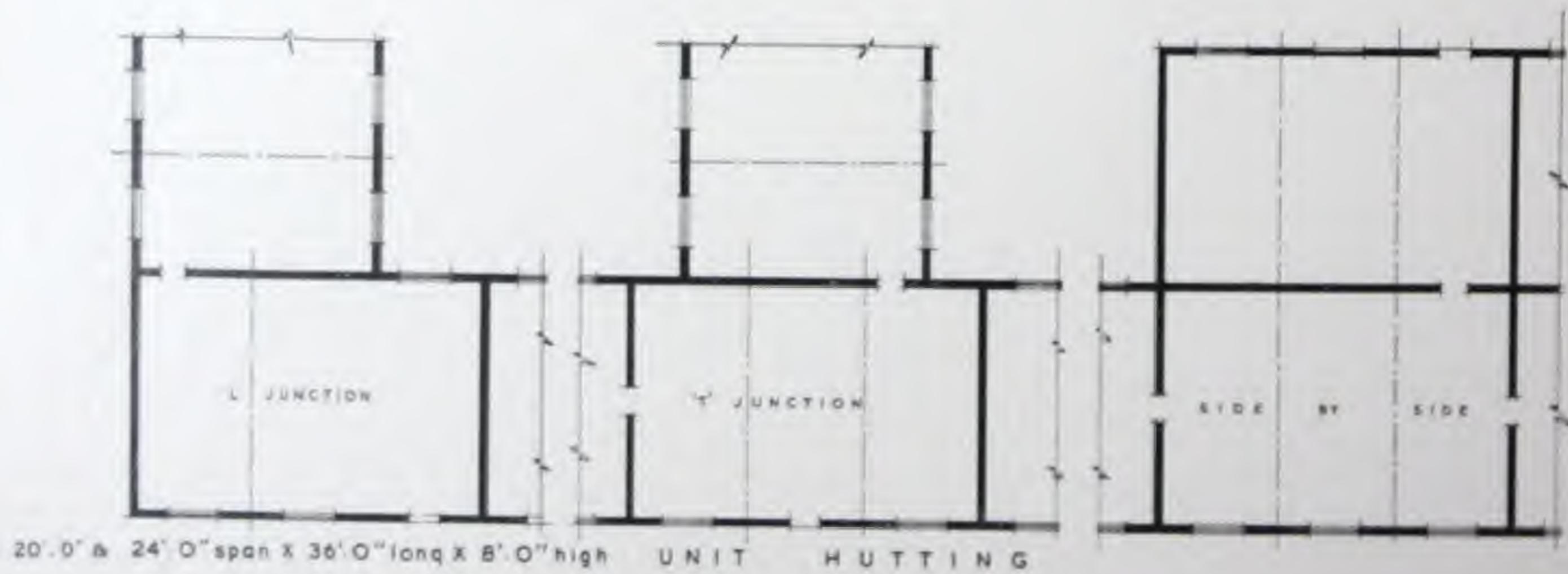
PART ELEVATION. 14' 0" HIGH BUTTRESSED HUTTING.



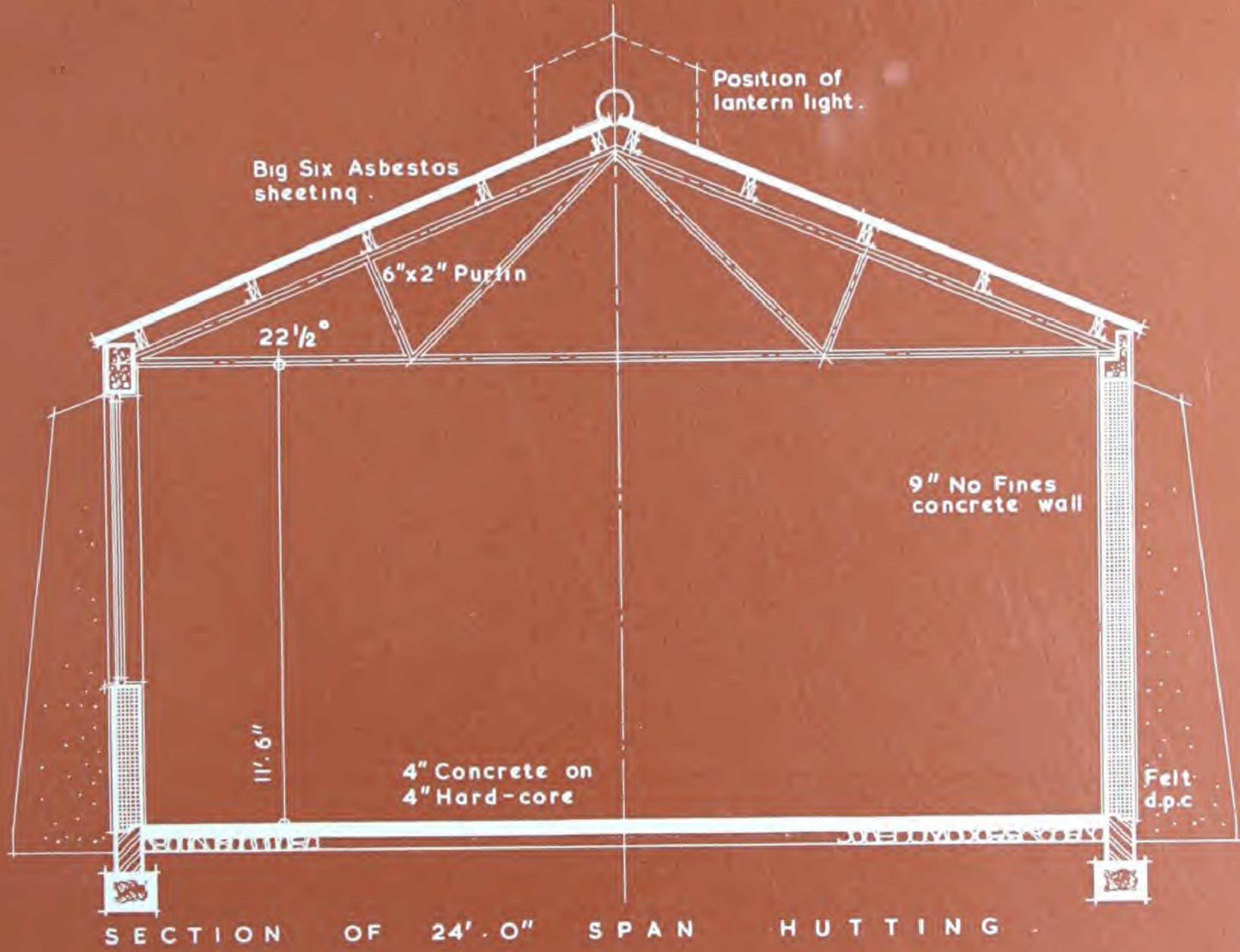
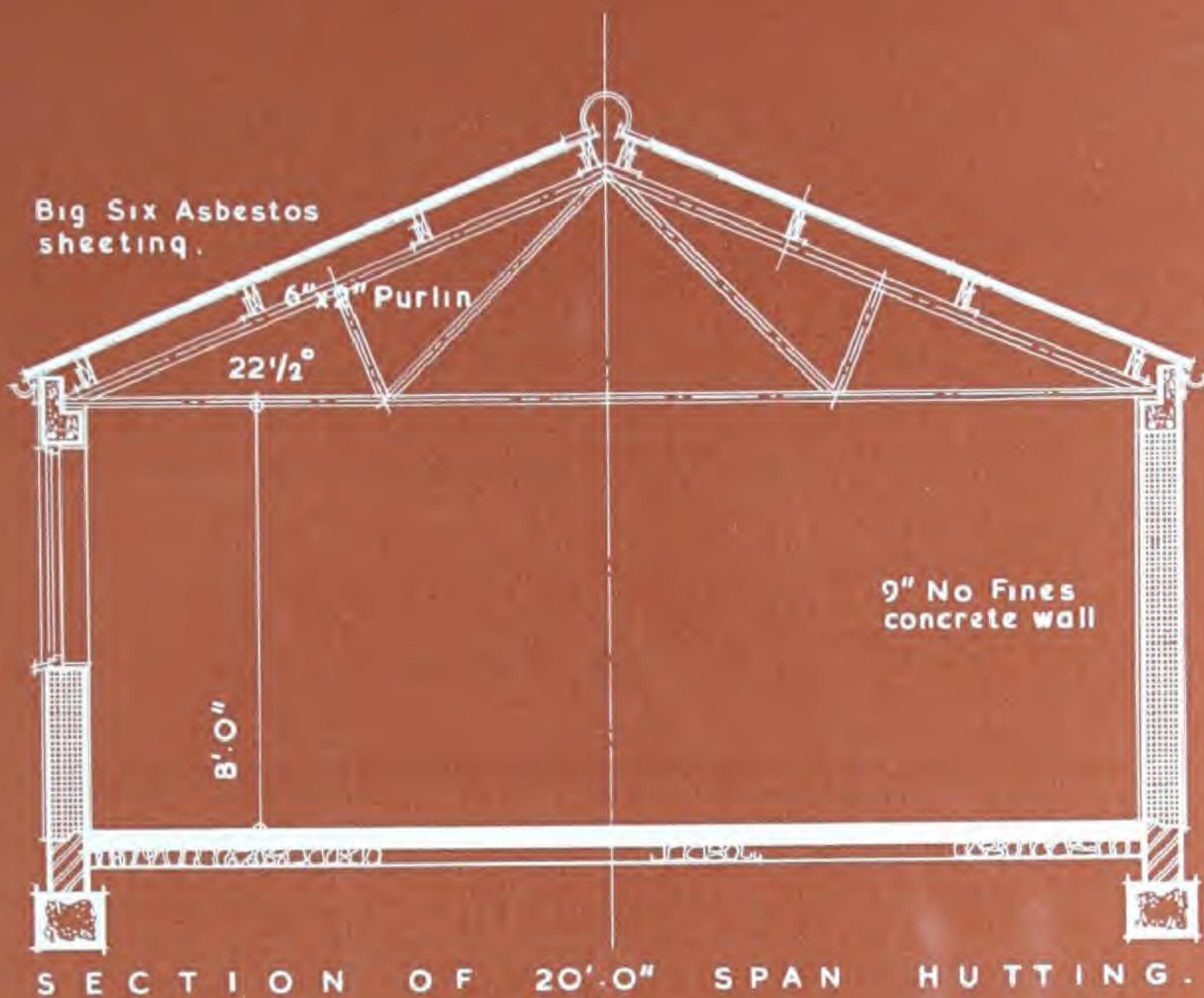
PART PLAN OF SINGLE 40' 0" SPAN



24' 0" span X 11' 6" high BUTTRESSED HUTTING



20' 0" x 24' 0" span x 36' 0" long x 8' 0" high UNIT HUTTING



IT WAS IN THE COURSE OF BUILDING THE CONSTRUCTION CAMP



for the Esso refinery at Fawley that it became evident that the No-fines method was equal to meeting the various requirements of camp construction in competition with all other building systems. The various units of accommodation built in No-fines at Fawley included reception offices, mess hall and recreation centre, canteen, dormitories, staff married quarters, sick bay, post office, shops and various other buildings. This camp, providing accommodation and facilities for 750 men, was completed within five months. No-fines has also played a great part in meeting the requirements of the U.S. Air Force in this country, and in the construction of R.A.F. aerodromes. A great variety of administrative and domestic buildings were, of course, necessary, and they include armouries, guard houses, stores and educational buildings, sick quarters, shops, post offices, airmen's clubs and messes and, of course, living quarters for all ranks. A school was designed for the Coventry City Corporation in an effort to cut the present cost per pupil. Although there was no great saving on the single-storey pavilion-type scheme, a very considerable economy has been achieved in two and three-storey construction.

**SCHOOLS
HOSTELS
BARRACKS**

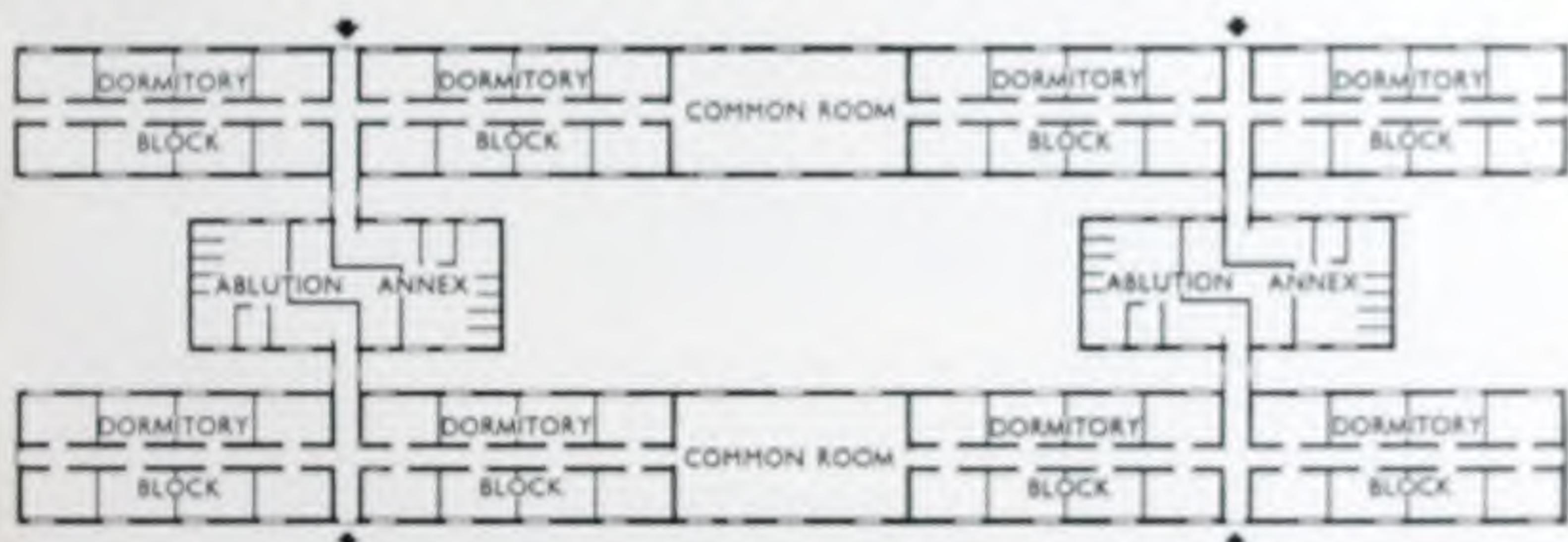
CONSTRUCTION CAMP SOUTHAMPTON



The photographs and diagrammatic plan are of a large Construction Camp built at Fawley, Southampton. Wimpey secured this contract in strict competition with many other forms of construction. The dormitory and ablutions consist of single-storey buildings of units 48 ft. by 18 ft. 6 in. A gang of 23 men completed sufficient units to house 750 personnel in 10 weeks. The ancillary buildings in this scheme such as canteen, club-house, etc, are built with a post and panel system, the posts being in situ concrete columns designed to take No-fines concrete panels.



Interior view of common room



PLAN OF DORMITORY BLOCK

SCALE 1 10 20 30 40 50 60 70 80 90 FEET

DESIGN STUDY FOR

**SECONDARY MODERN SCHOOL
IN NO-FINES CONCRETE**

CITY OF COVENTRY ARCHITECT D. E. E. GIBSON, O.B.E., M.A., A.R.I.B.A., M.T.P.I.



SOUTH WEST ASPECT



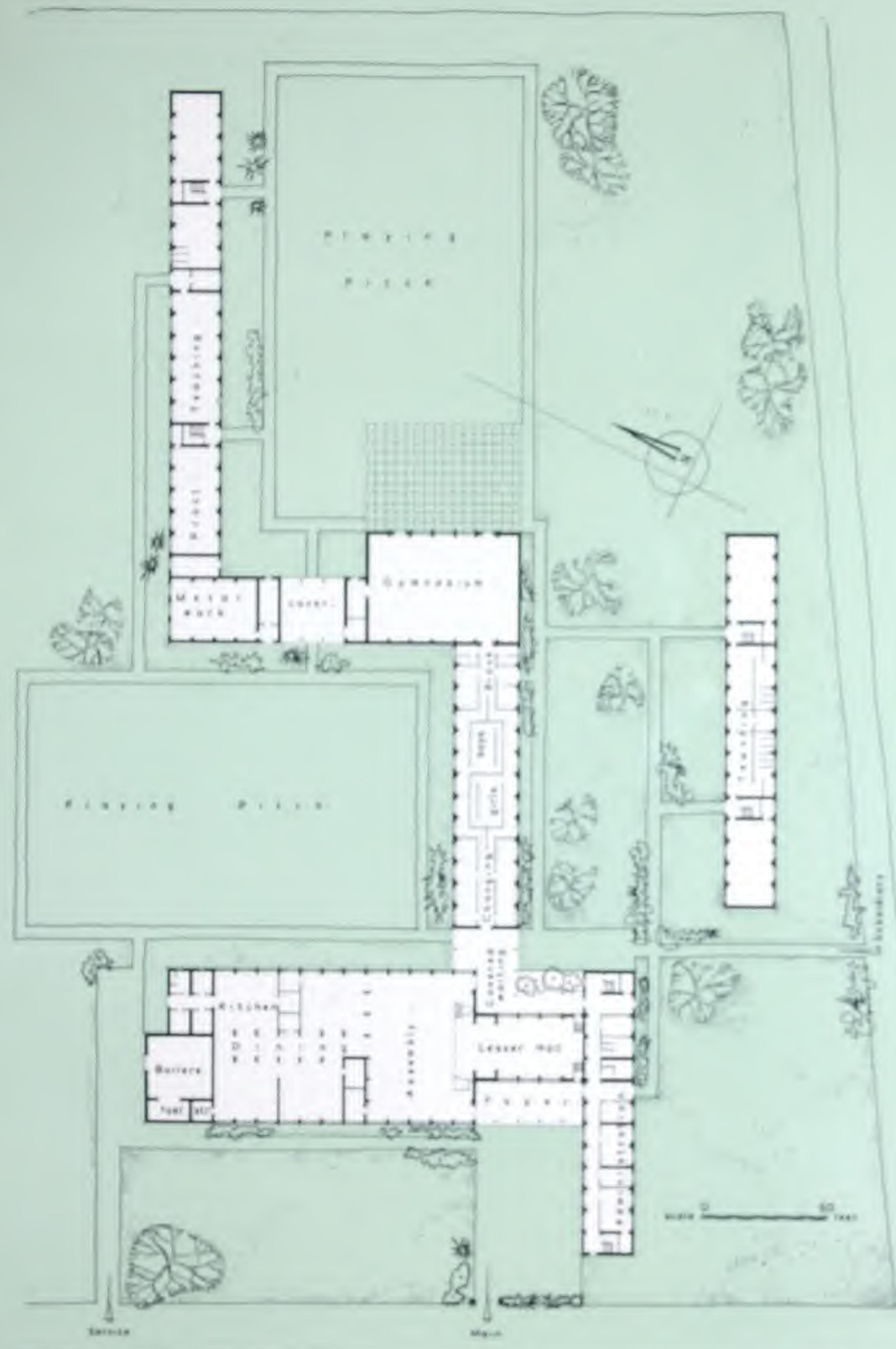
SOUTH EAST ASPECT



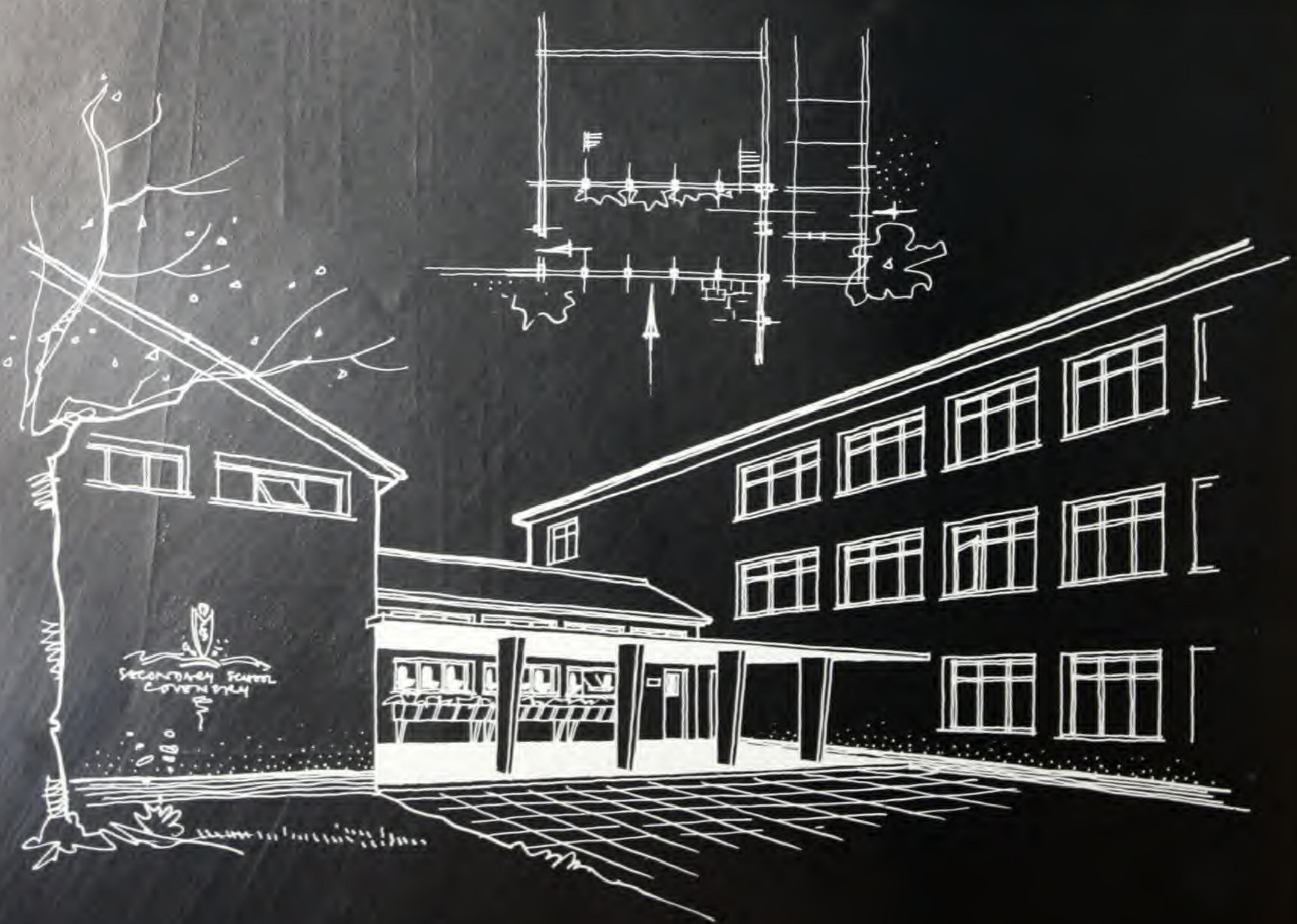
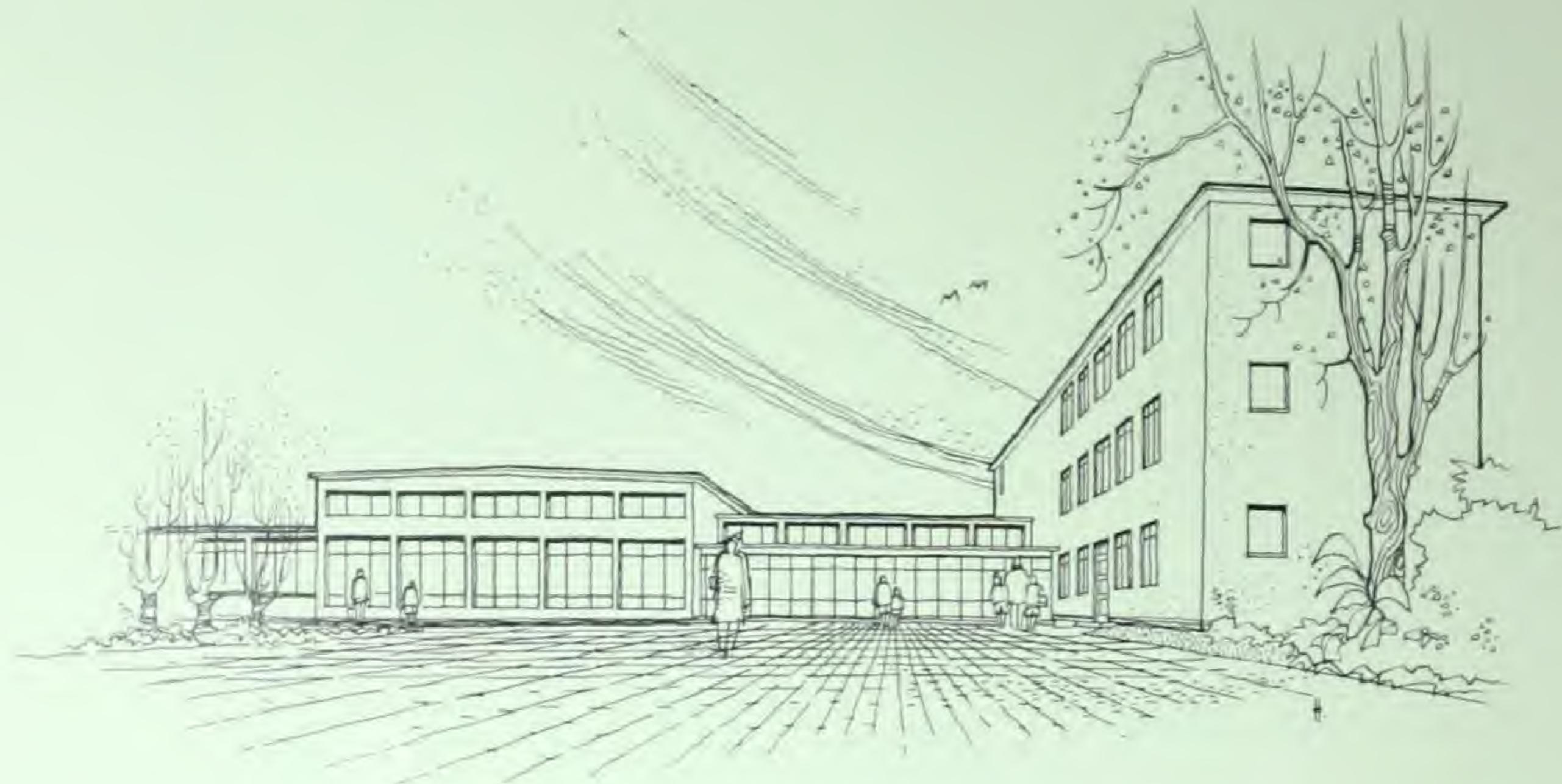
NORTH EAST ASPECT

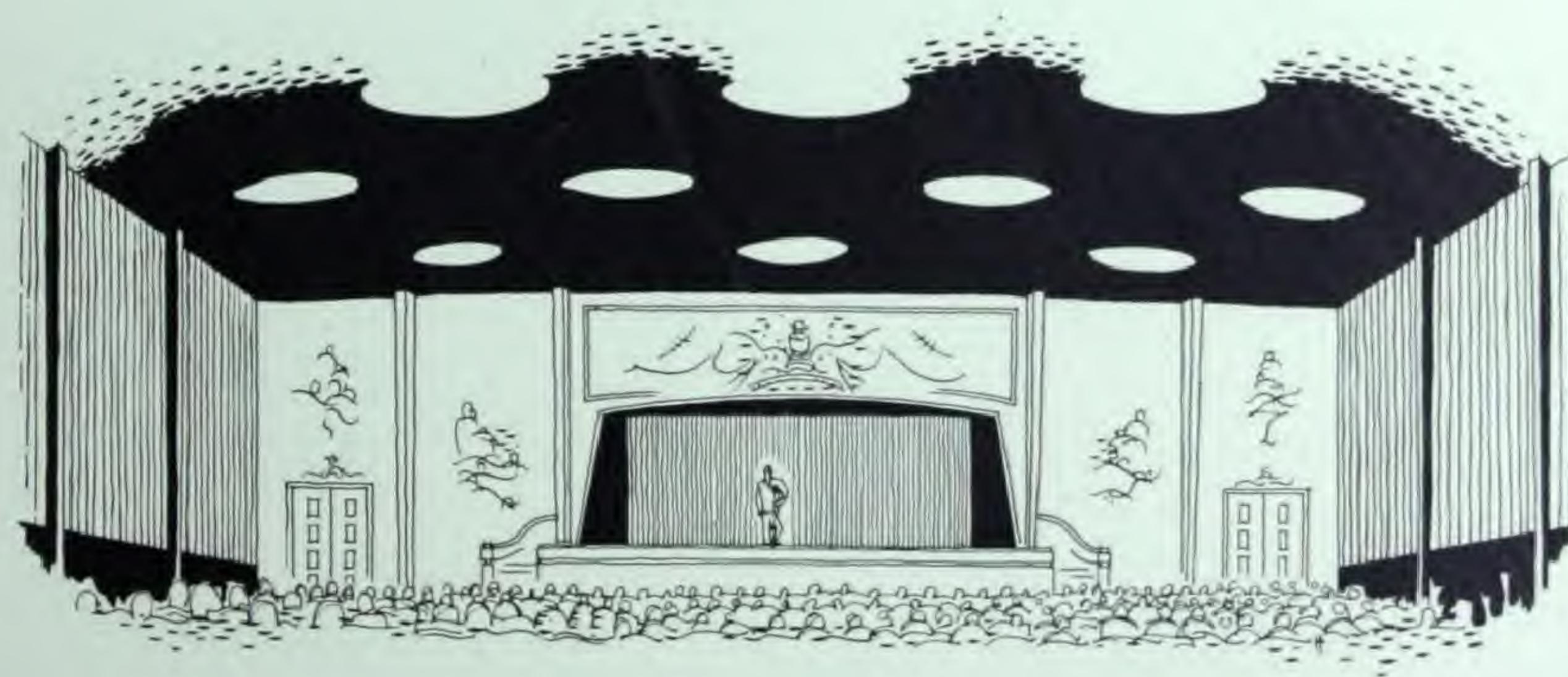
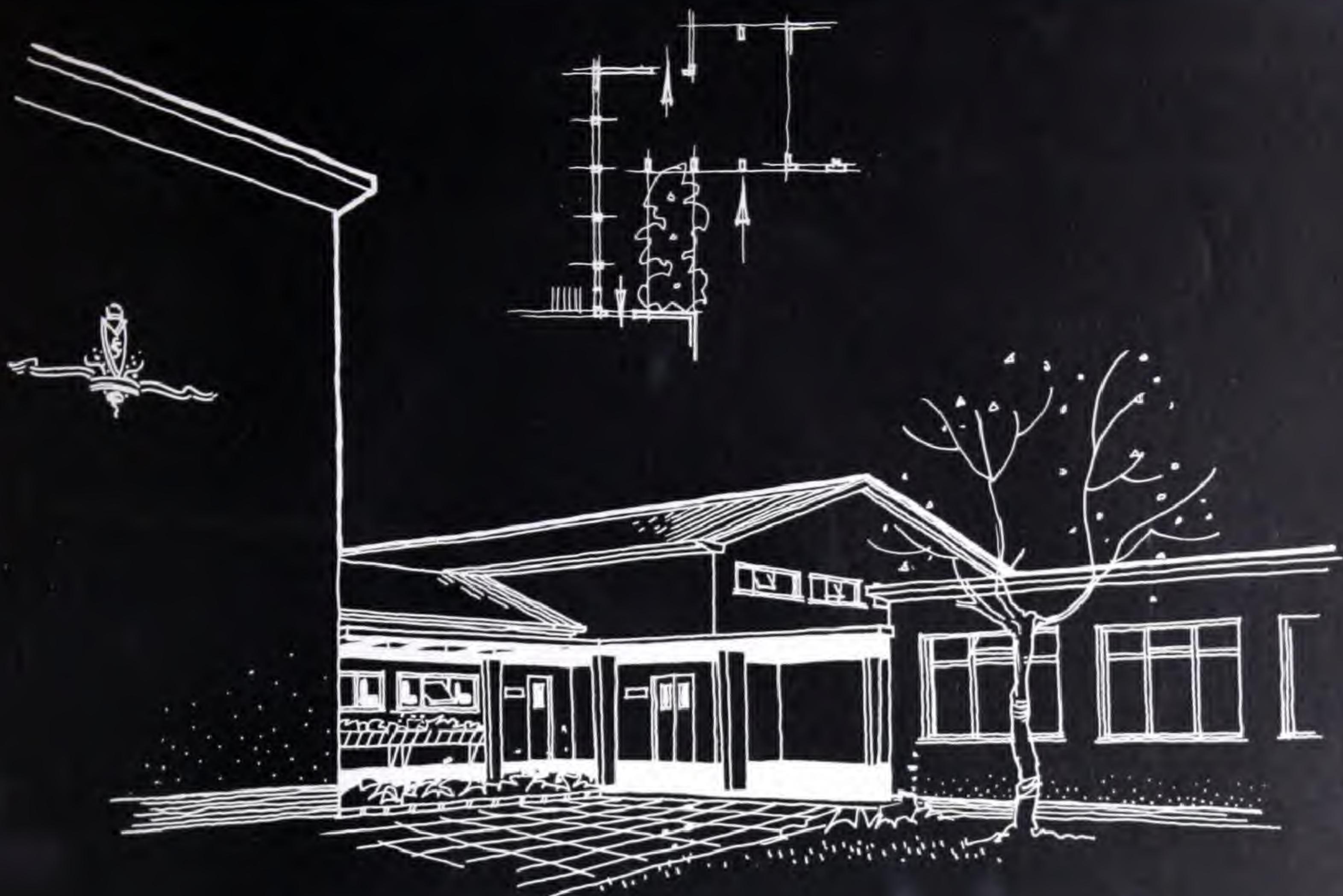


LONGITUDINAL SECTION



GROUND FLOOR PLAN

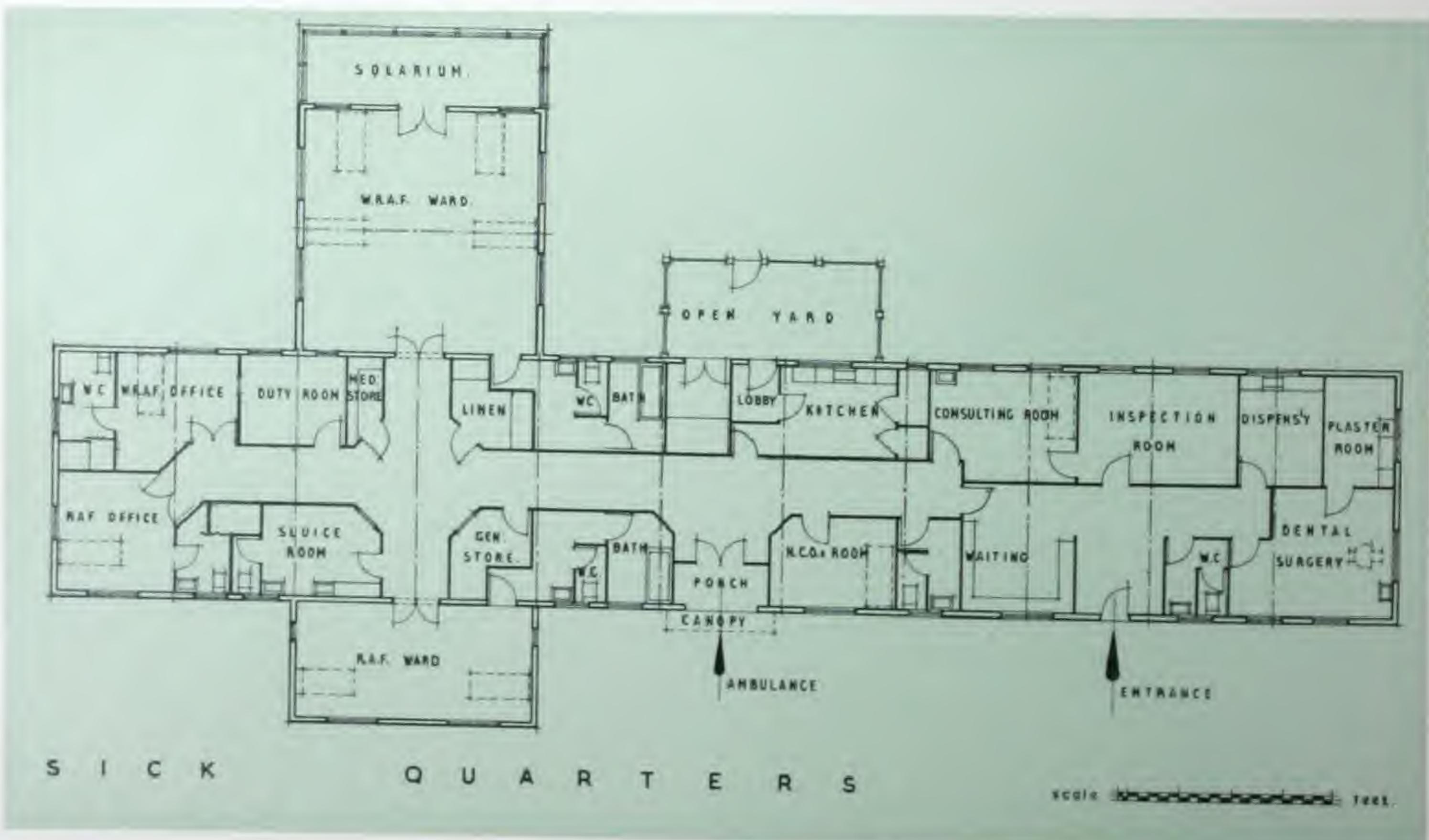






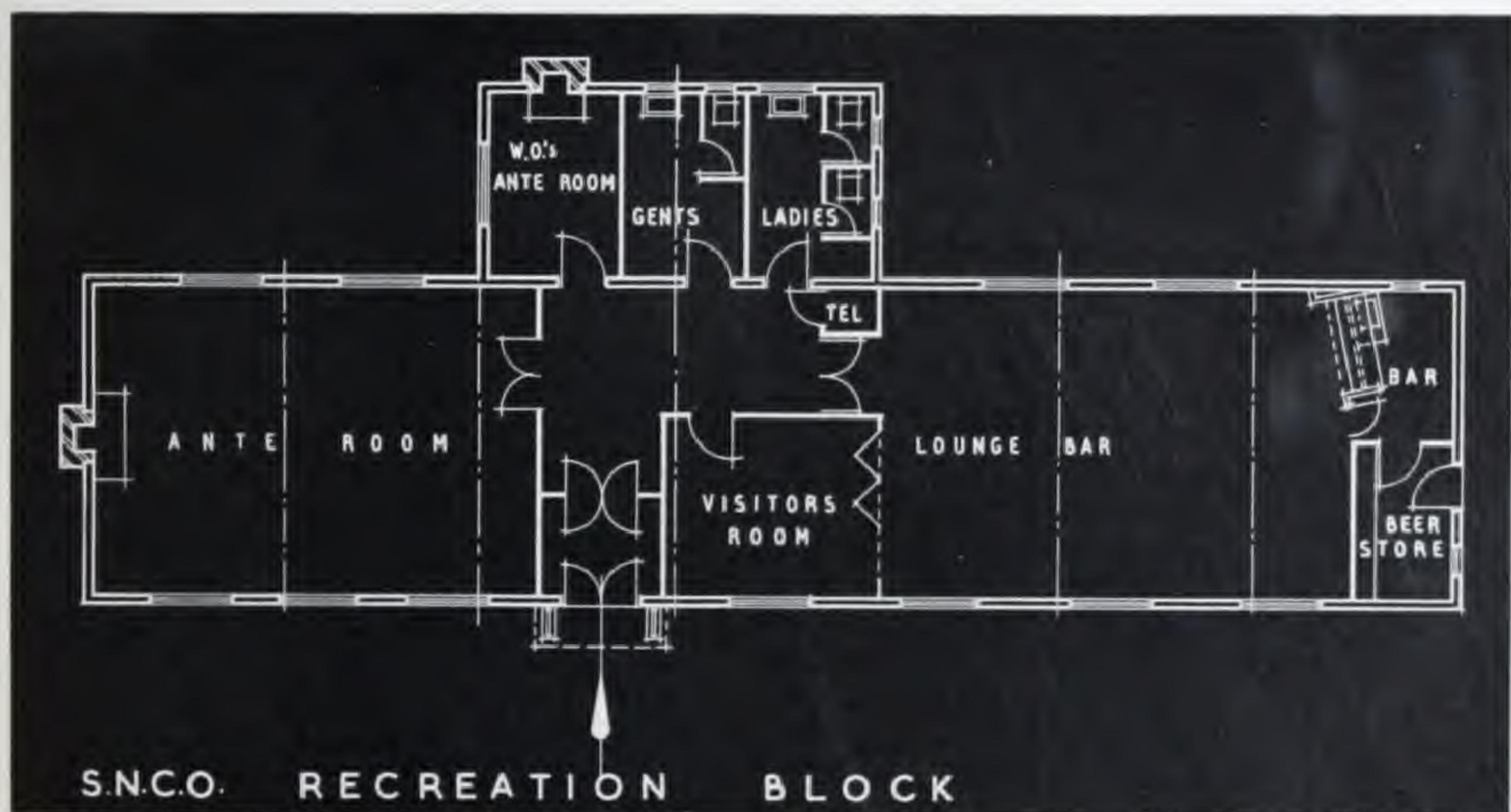
SICK QUARTERS

Photograph shows sick quarters at an R.A.F. camp in the North of England. The wing in foreground being the solarium





Senior N.C.O.'s recreation building



Photograph below shows W.R.A.F. living quarters



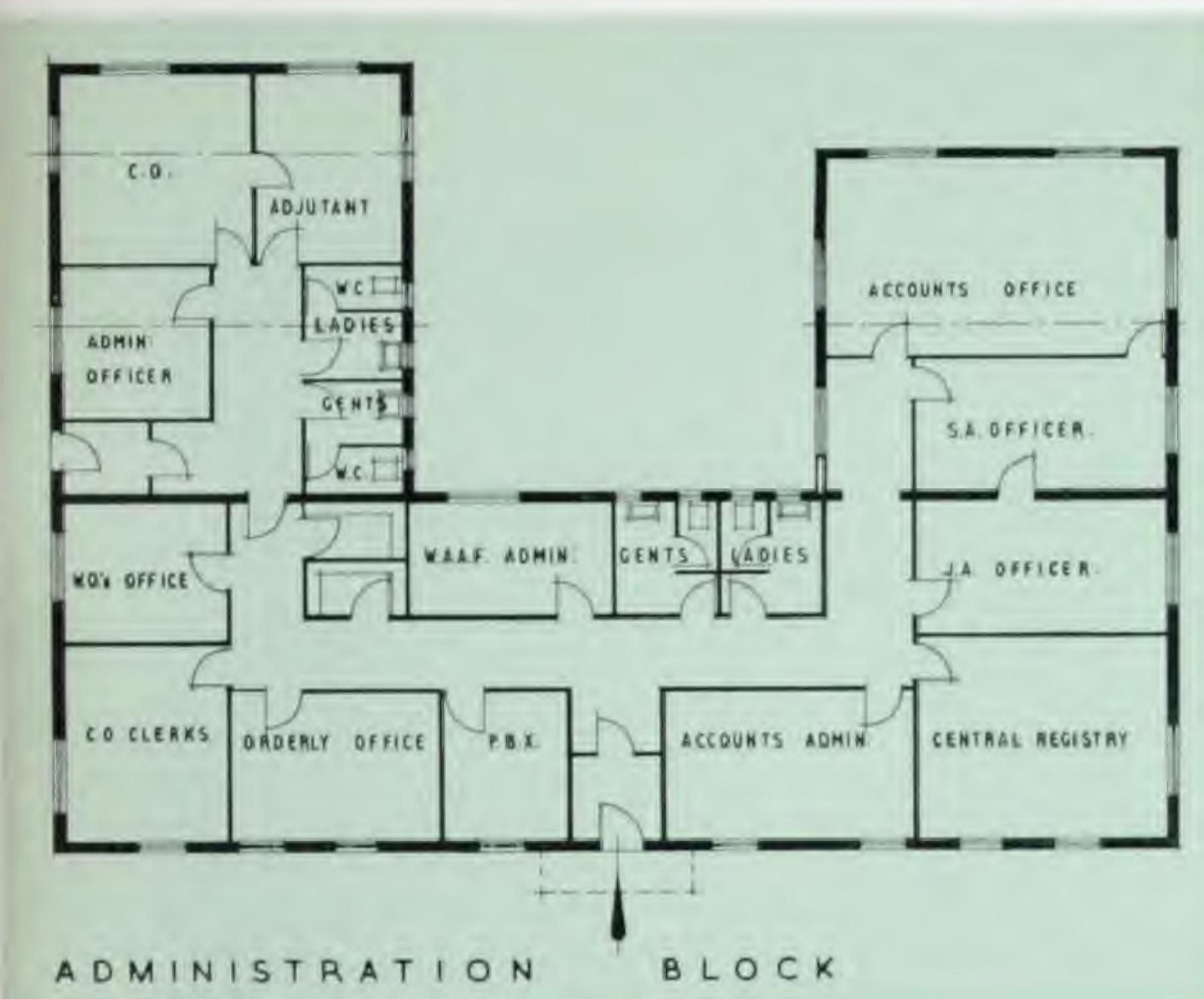


Photograph below shows a dining-hall for 350 airmen; the view shows servery and cafeteria. Building shown top left is used for both mess hall and cinema





Administration building in foreground.
R.A.F. living quarters in rear



The two interior views
show servery to the
Officers' Mess and the
Airmen's Club



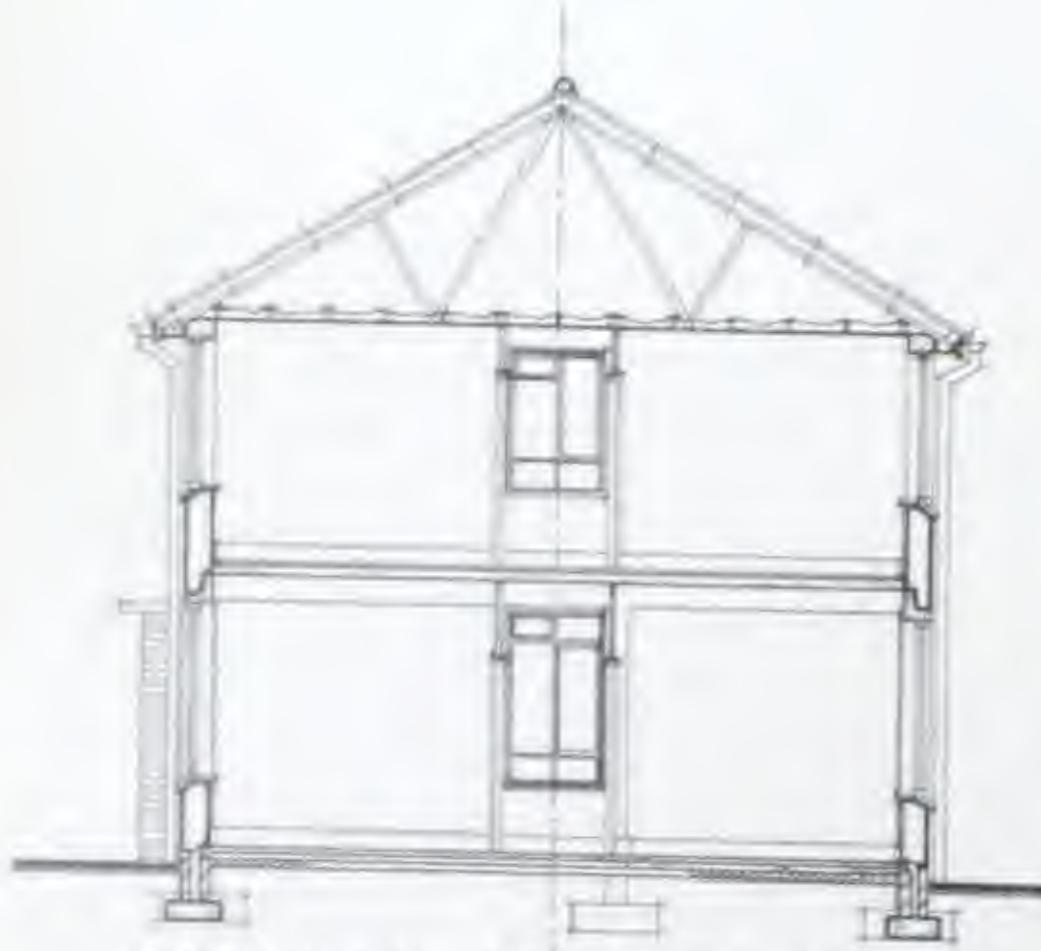
Exterior view of dining-hall and cinema wing





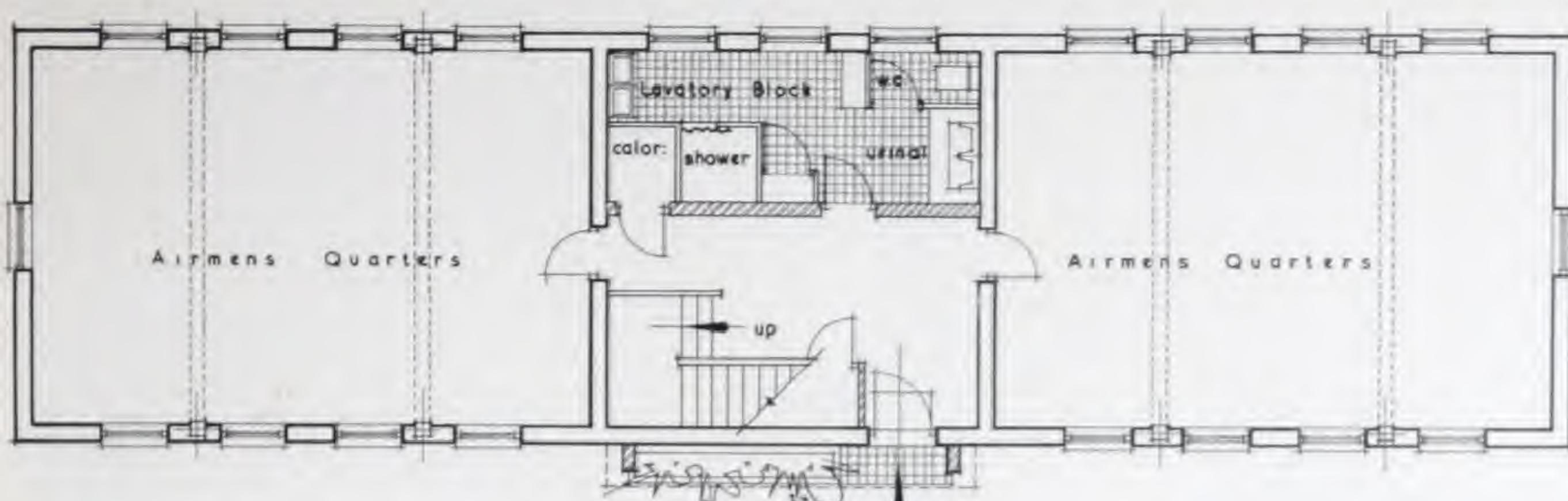
Entrance detail

Photographs show living quarters for Air Force personnel. These barracks were in the south of England as part of the defence programme. The system is No-fines

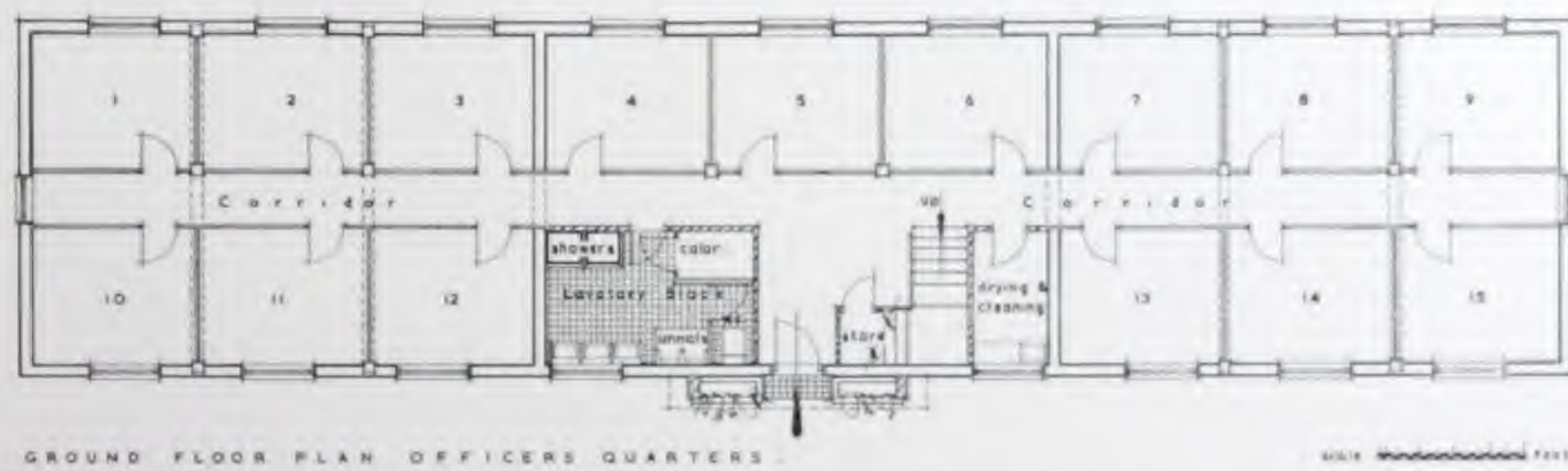


TYPICAL SECTION THRO
OFFICERS QUARTERS





Front elevation





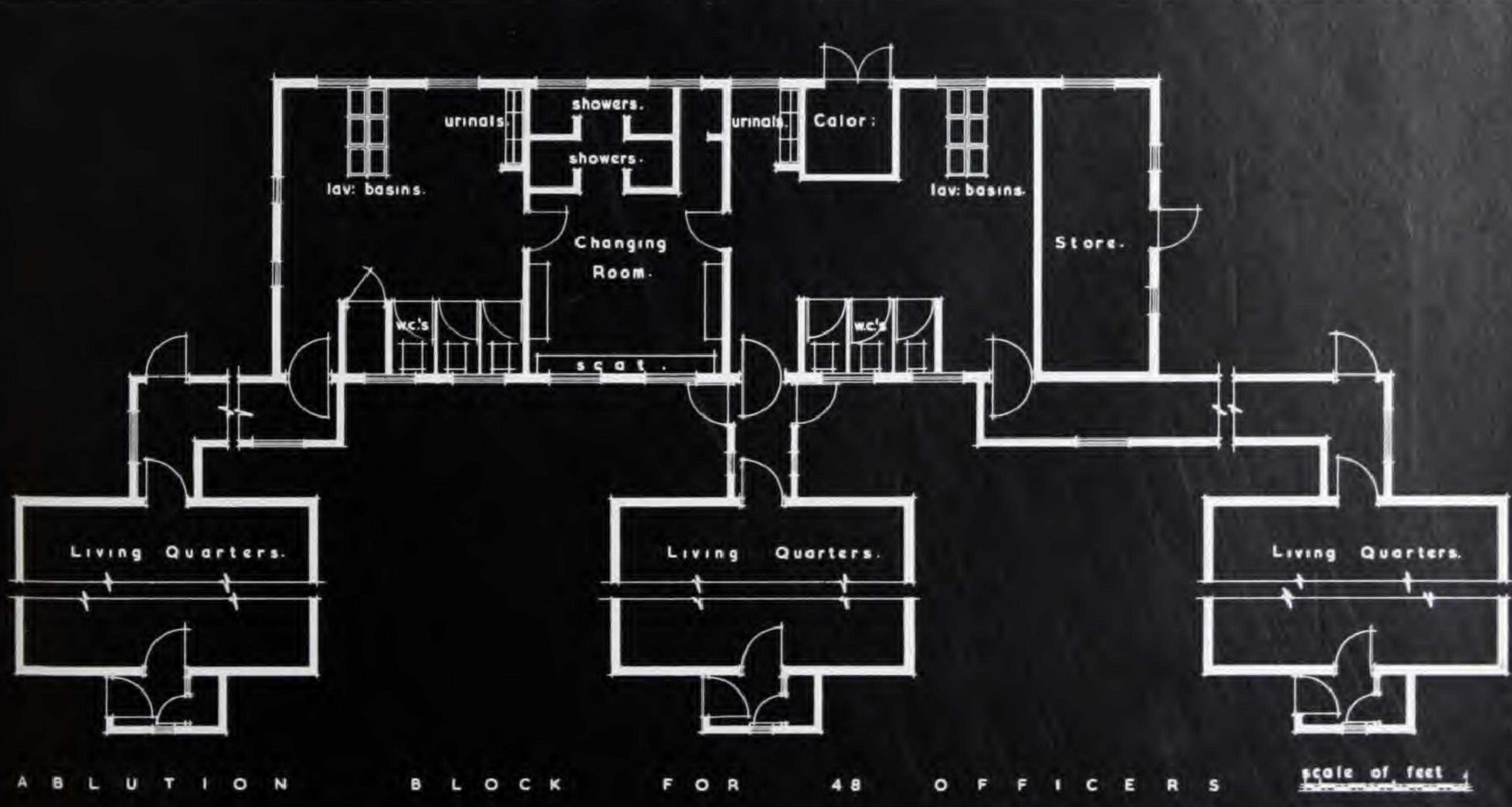
ABLUTIONS BLOCK

Photographs on this page show an ablutions block built in No-fines concrete at a military camp



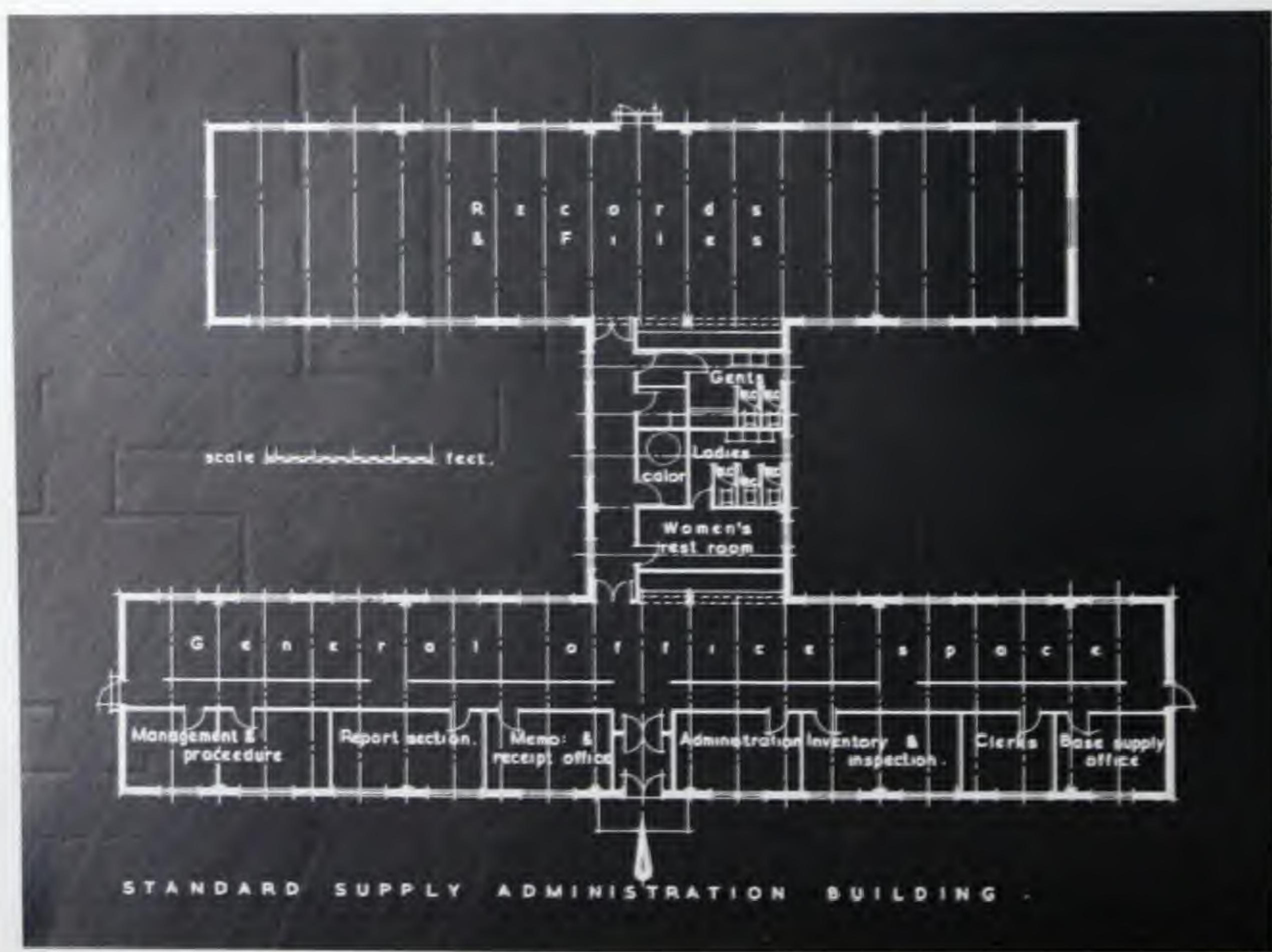


Photograph shows No-fines concrete in course of preparation

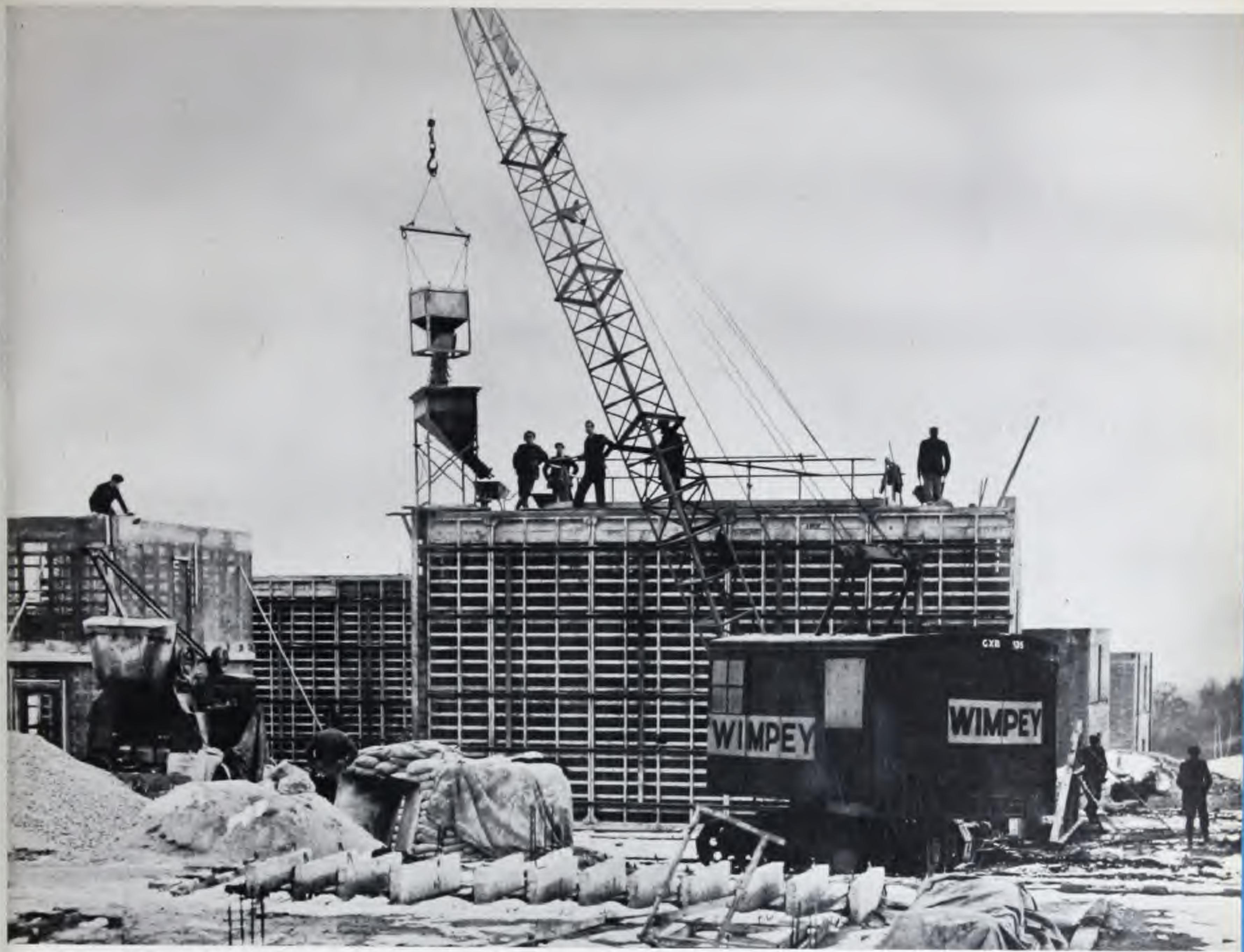




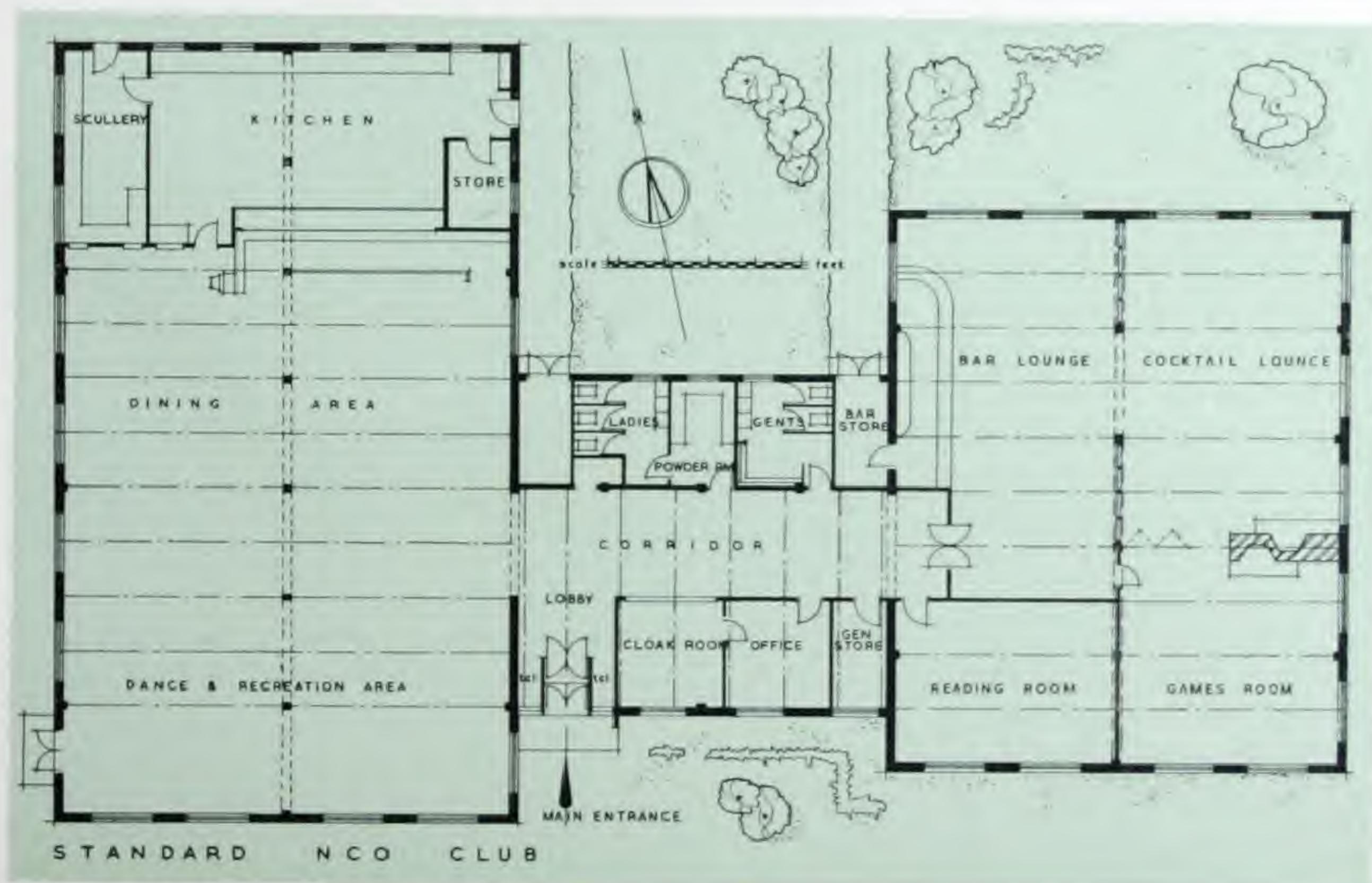
Photographs here show No-fines standard hutting at a military camp



STANDARD SUPPLY ADMINISTRATION BUILDING



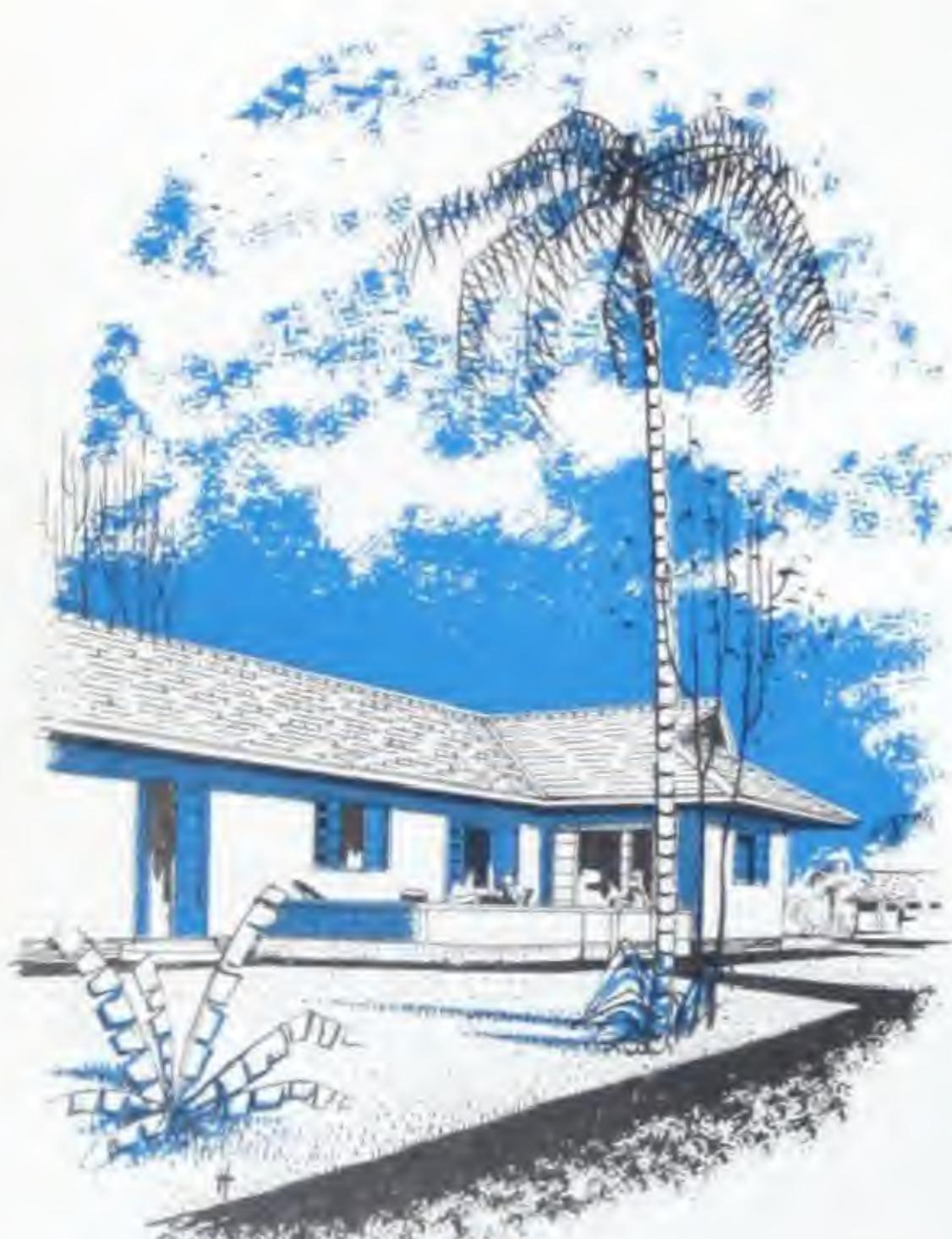
A barrack block being poured in No-fines concrete



This plan is one of many designs for buildings other than living accommodation

THE ADOPTION OF NO-FINES OVERSEAS must depend

upon the availability of a suitable stone aggregate. It is for this reason that we utilize two types of construction, and the 'Situfoam' method, which is used when sand is the only available material, has been dealt with separately elsewhere. It will be seen from the accompanying illustrations that the character of No-fines buildings abroad ranges from low-cost accommodation for the native population to the construction of major buildings—offices, flats, etc. The No-fines method is particularly advantageous in sparsely populated areas, when a mechanized construction, which minimizes the importation of labour and obviates the expense involved in its housing and general upkeep, has a vital and additional value. It is, of course, necessary to send out key personnel, but the No-fines method is ideally suited to the employment of unskilled labour. By its very nature, No-fines concrete has properties of thermal insulation which are a great advantage in extreme climates. The versatility of the method is thus proved not only in the diverse nature of the buildings required but also in its adaptability to varied climatic conditions.



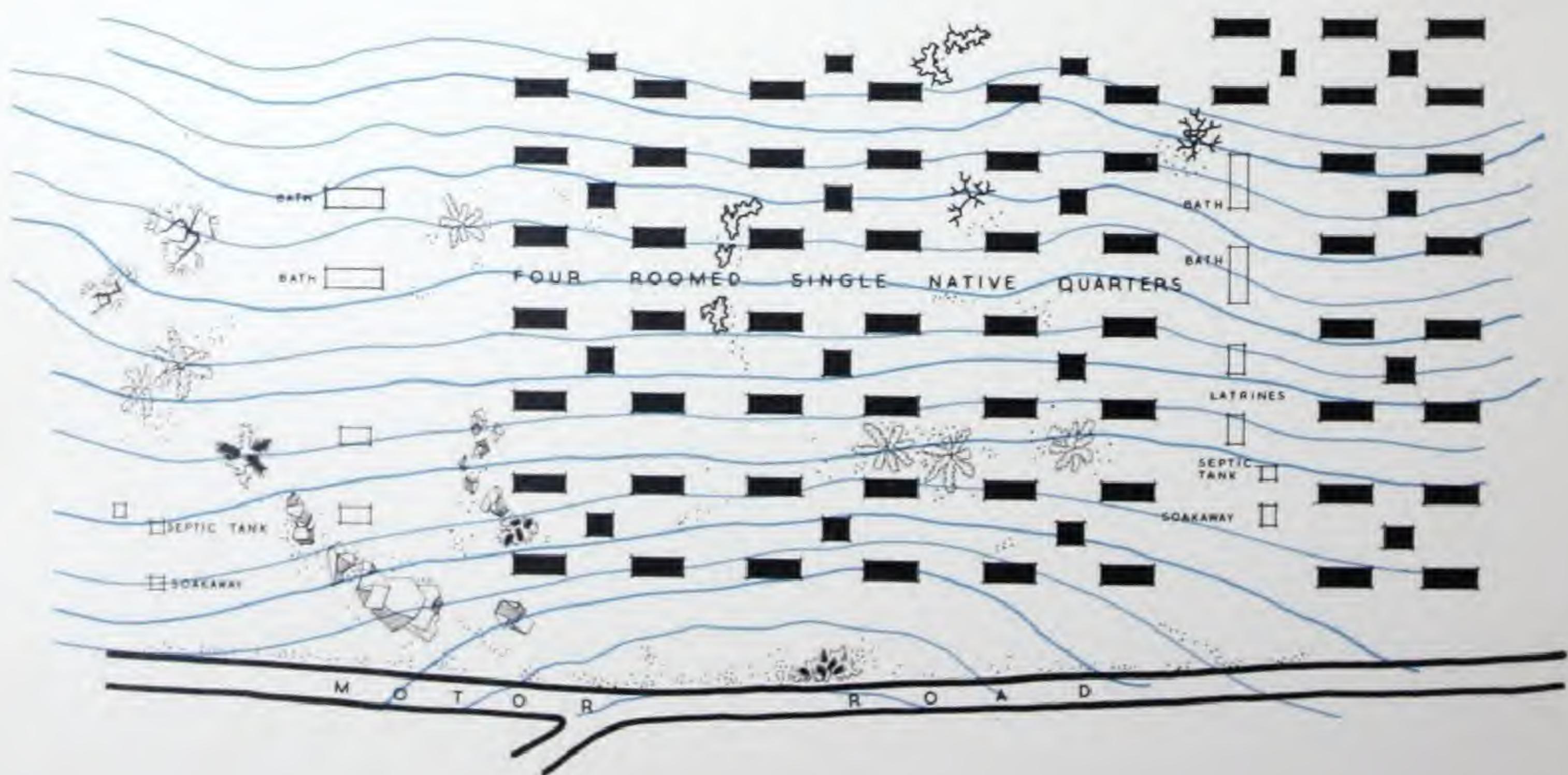
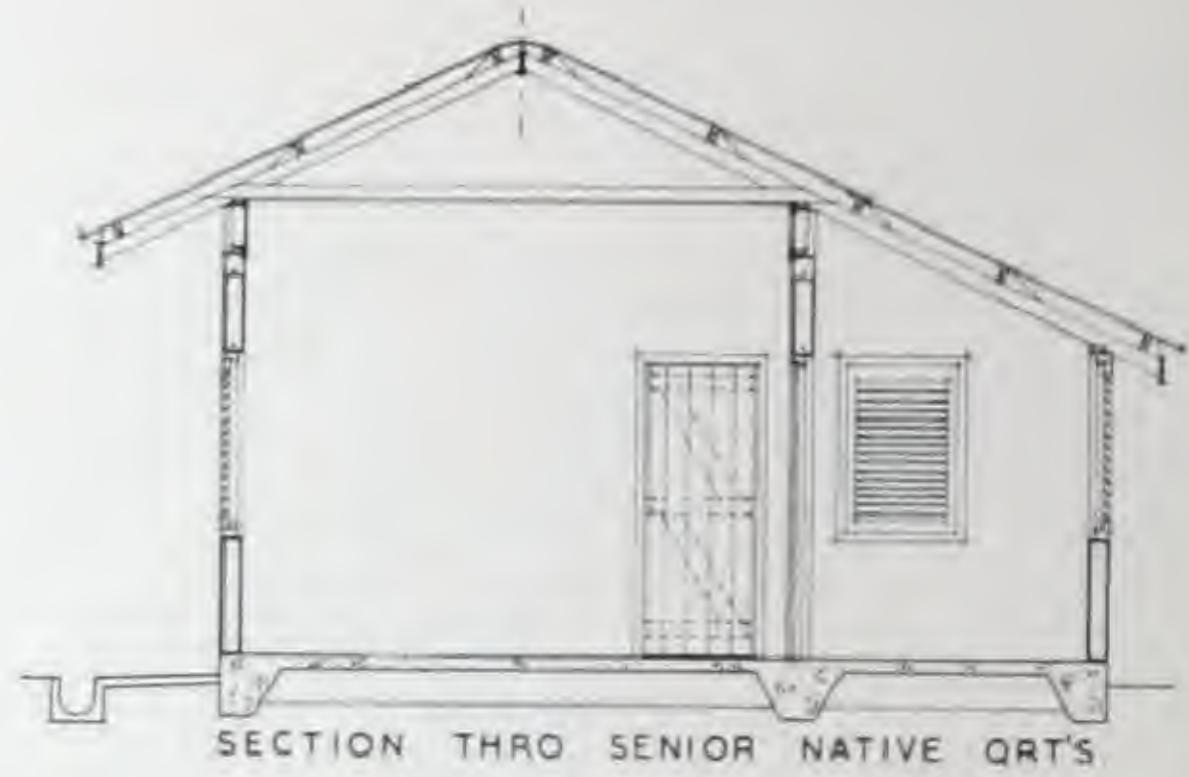
OVERSEAS

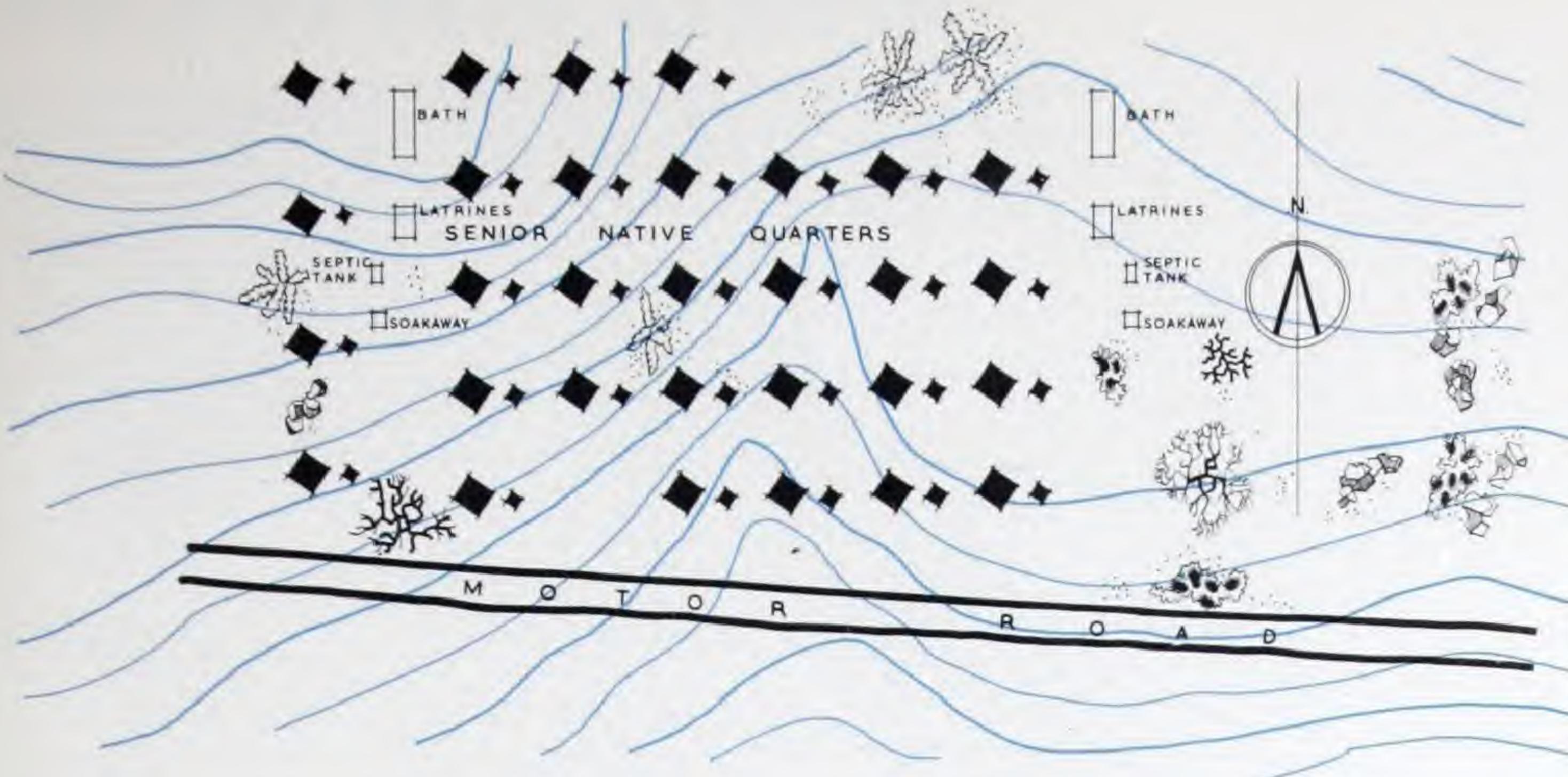


Photograph shows native married quarters



Block of four open-type kitchens

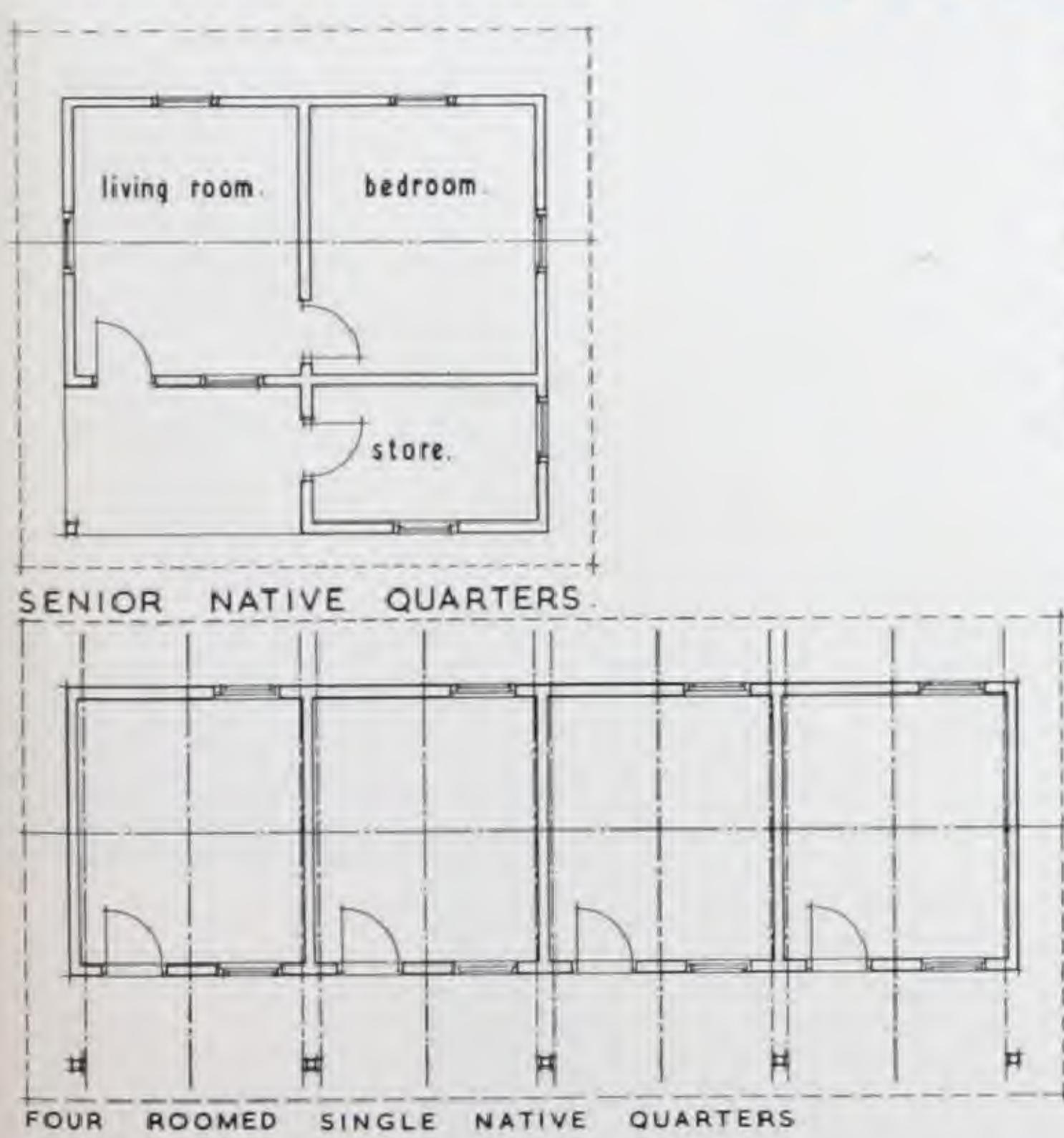




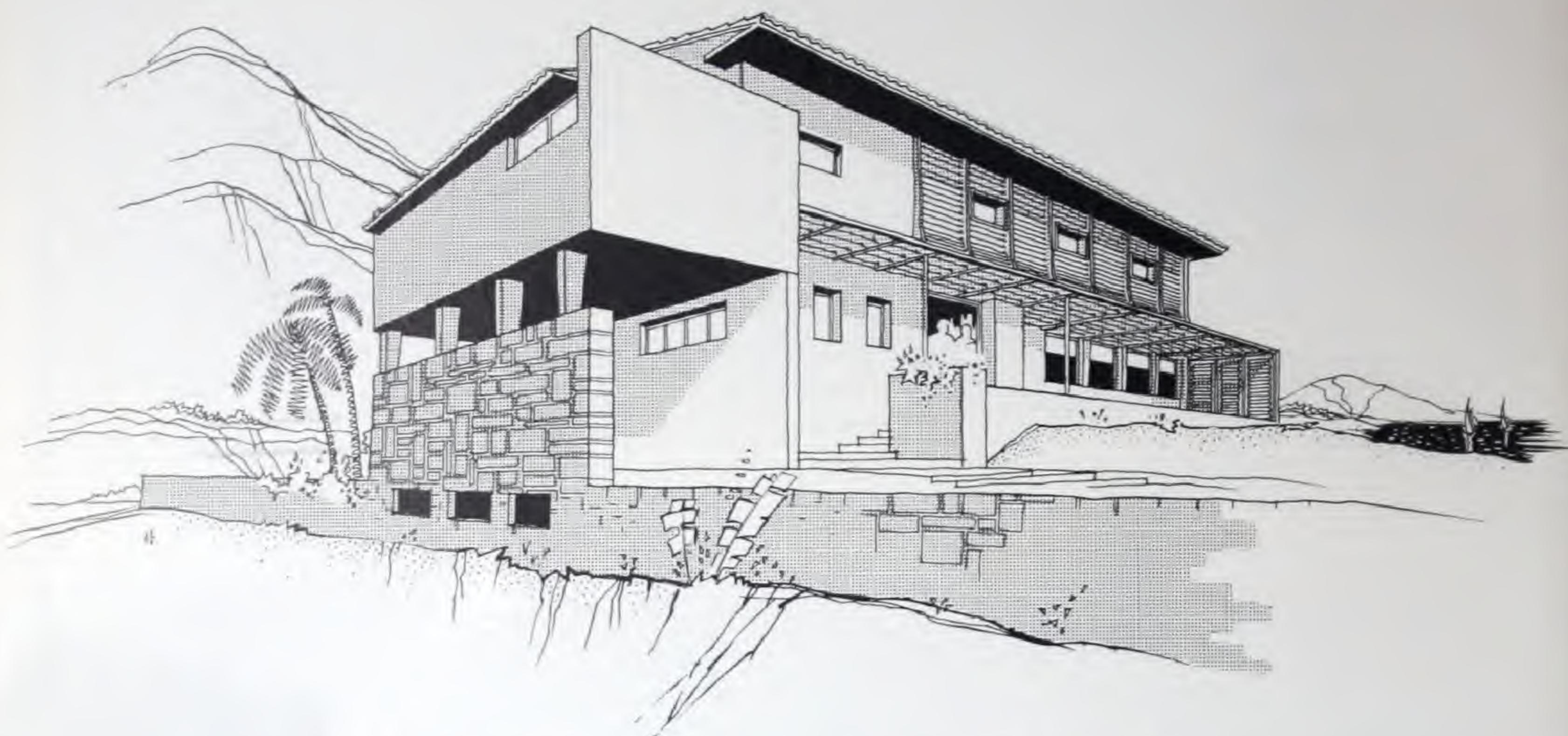
AWASO . GOLD COAST

The housing problem of the British Aluminium Company in providing accommodation for their African staff employed in the bauxite mines at Awaso was speedily solved when the Wimpey No-fines method of construction was adopted. Utilizing local aggregates to a specification prepared by our specialists, fifty quarters were constructed at the rate of one per day by locally recruited African labour with supervision by the Wimpey experts. Two types of dwelling were provided, comprising three-roomed detached bungalows and bachelor quarters in blocks of four. The whole contract was completed within a few months.

Village Hall built in this scheme



MIDDLE EAST PROJECT

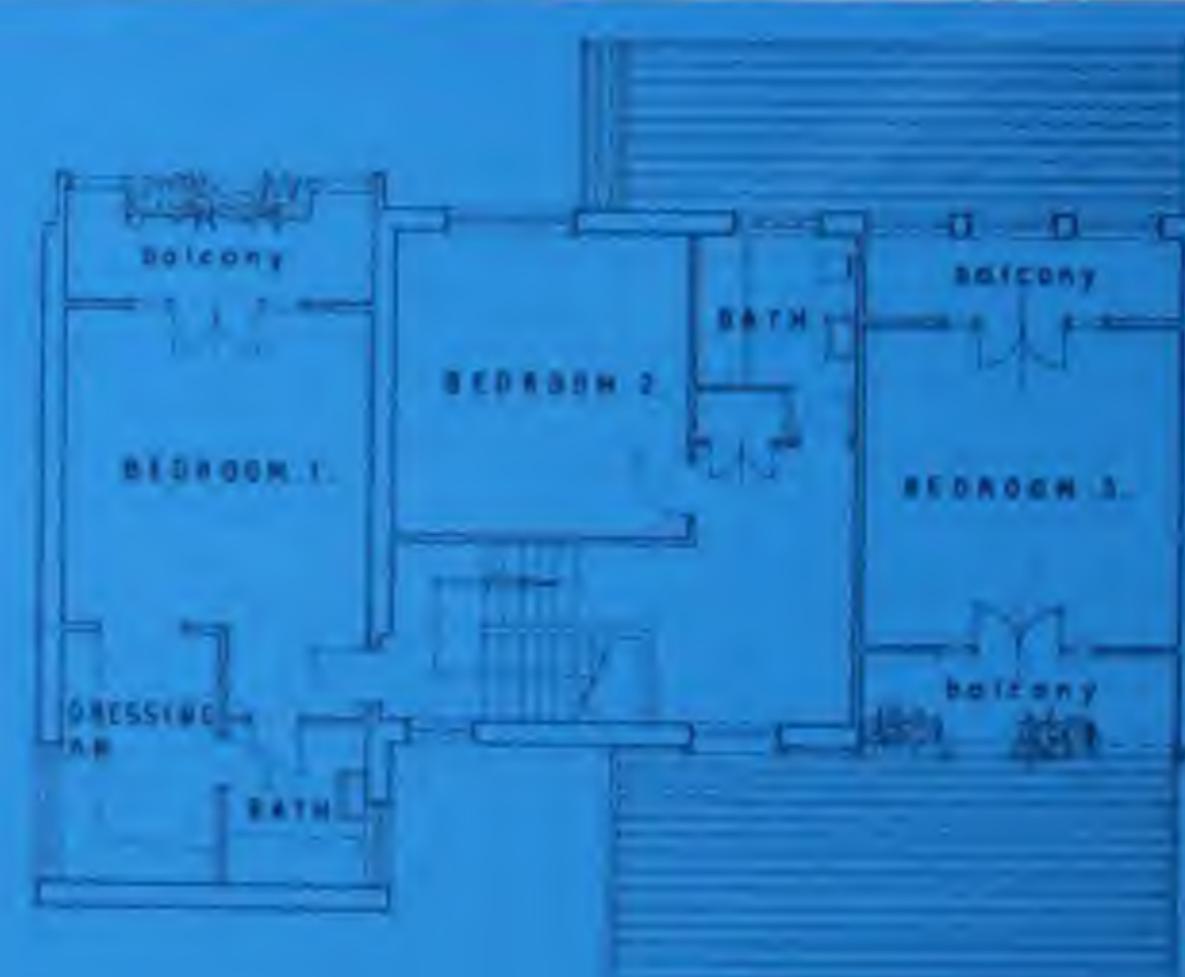


THREE-BEDROOM MANAGEMENT TYPE HOUSE

Floor Areas

	Sq. ft.
Lounge	345
Dining	140
Kitchen	161
Bedroom 1	221
Dressing Room	90
Bedroom 2	202
Bedroom 3	225

Total area measured between internal faces of external walls, excluding verandahs, 2,126 sq. ft.

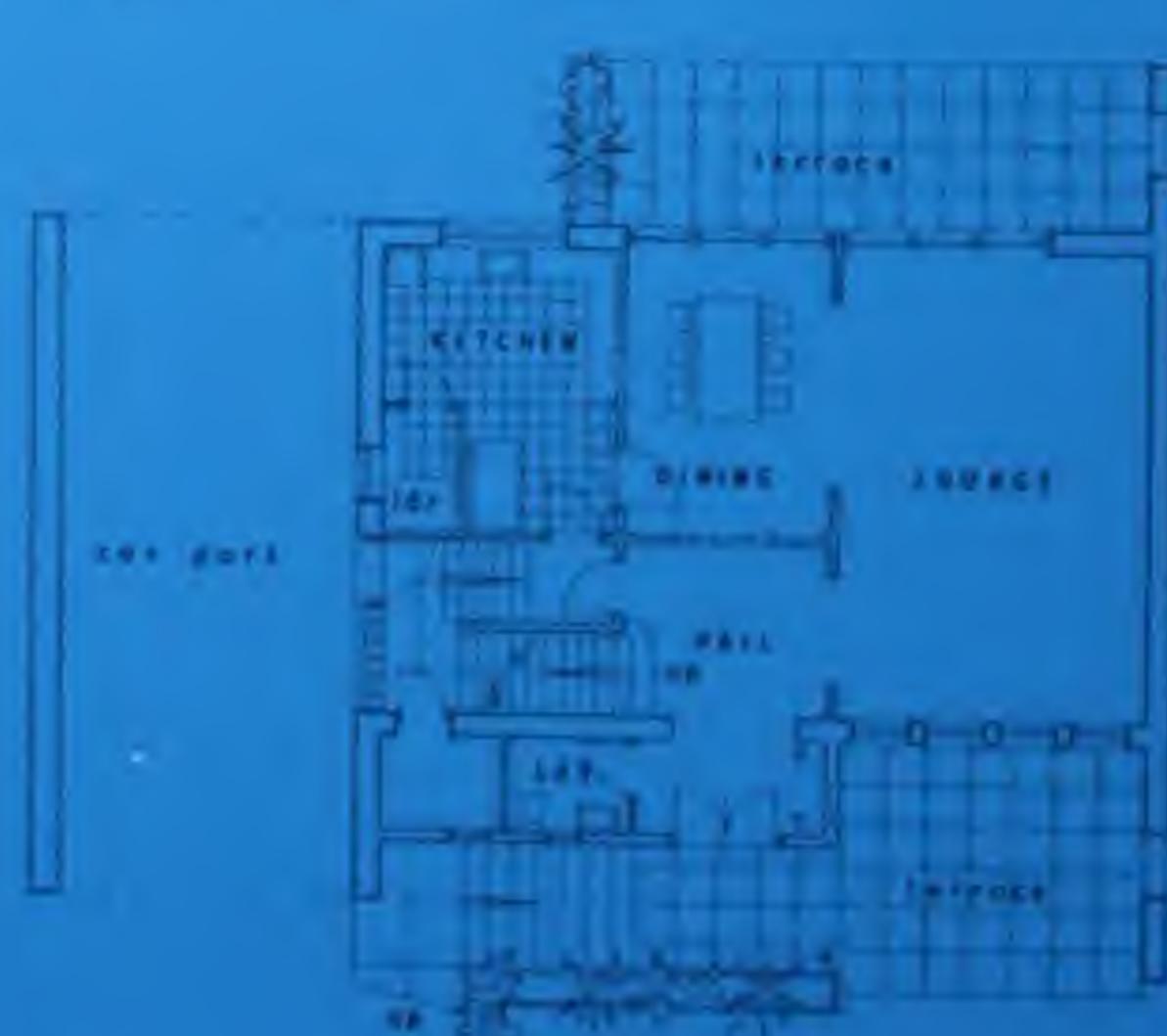


First Floor

Scale of feet



Sub Floor



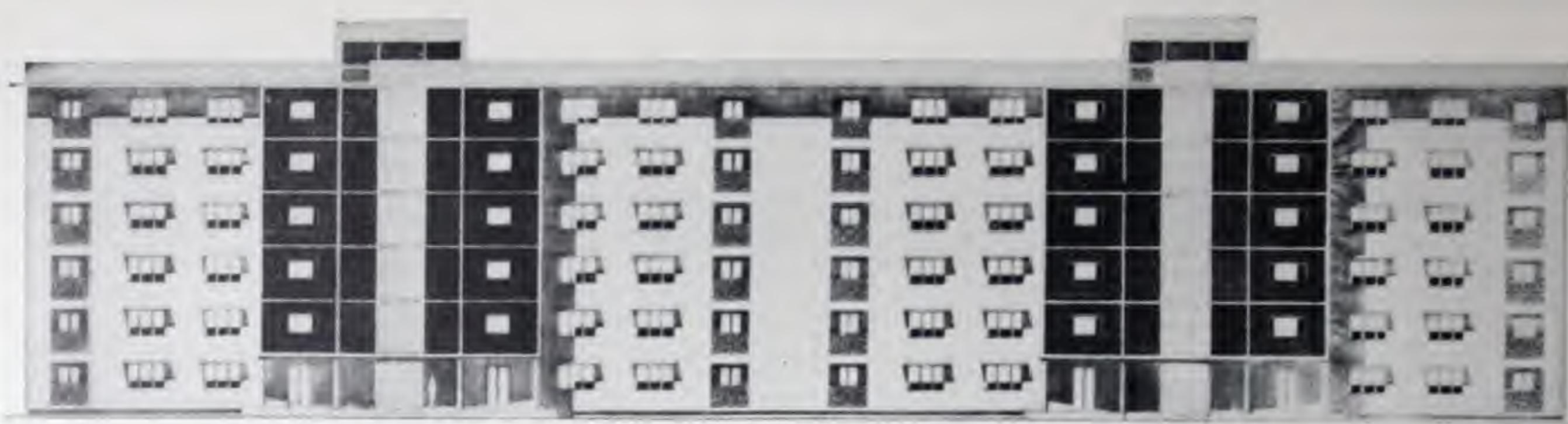
Ground Floor



PORT AND MARINE OFFICES



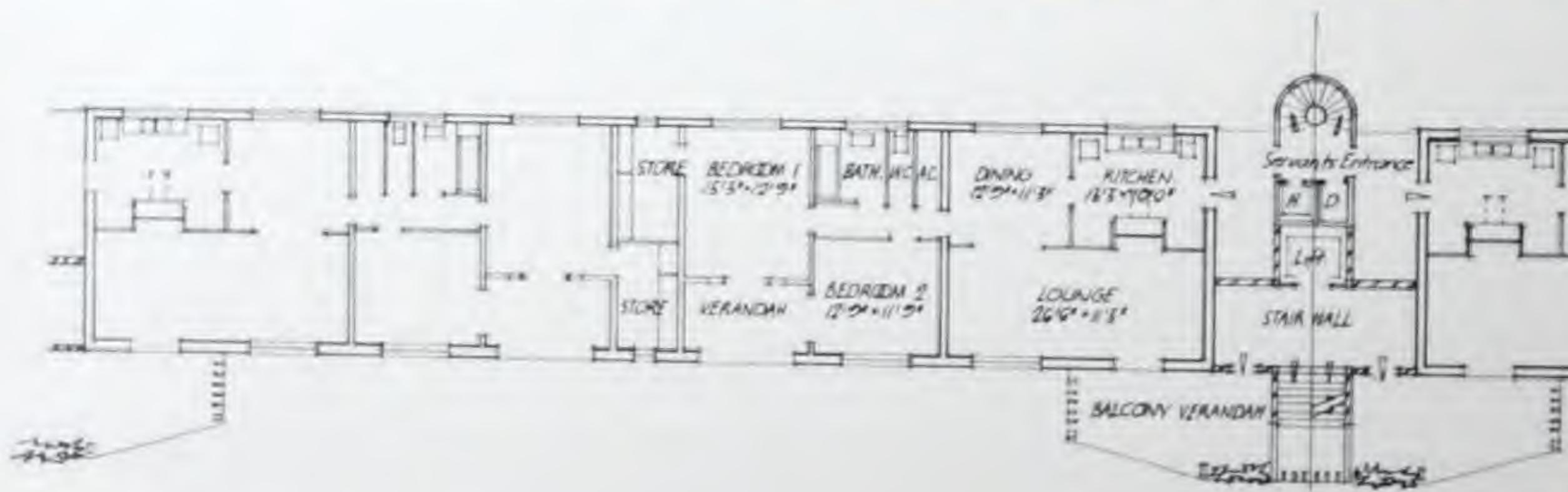
ADMINISTRATION BUILDING



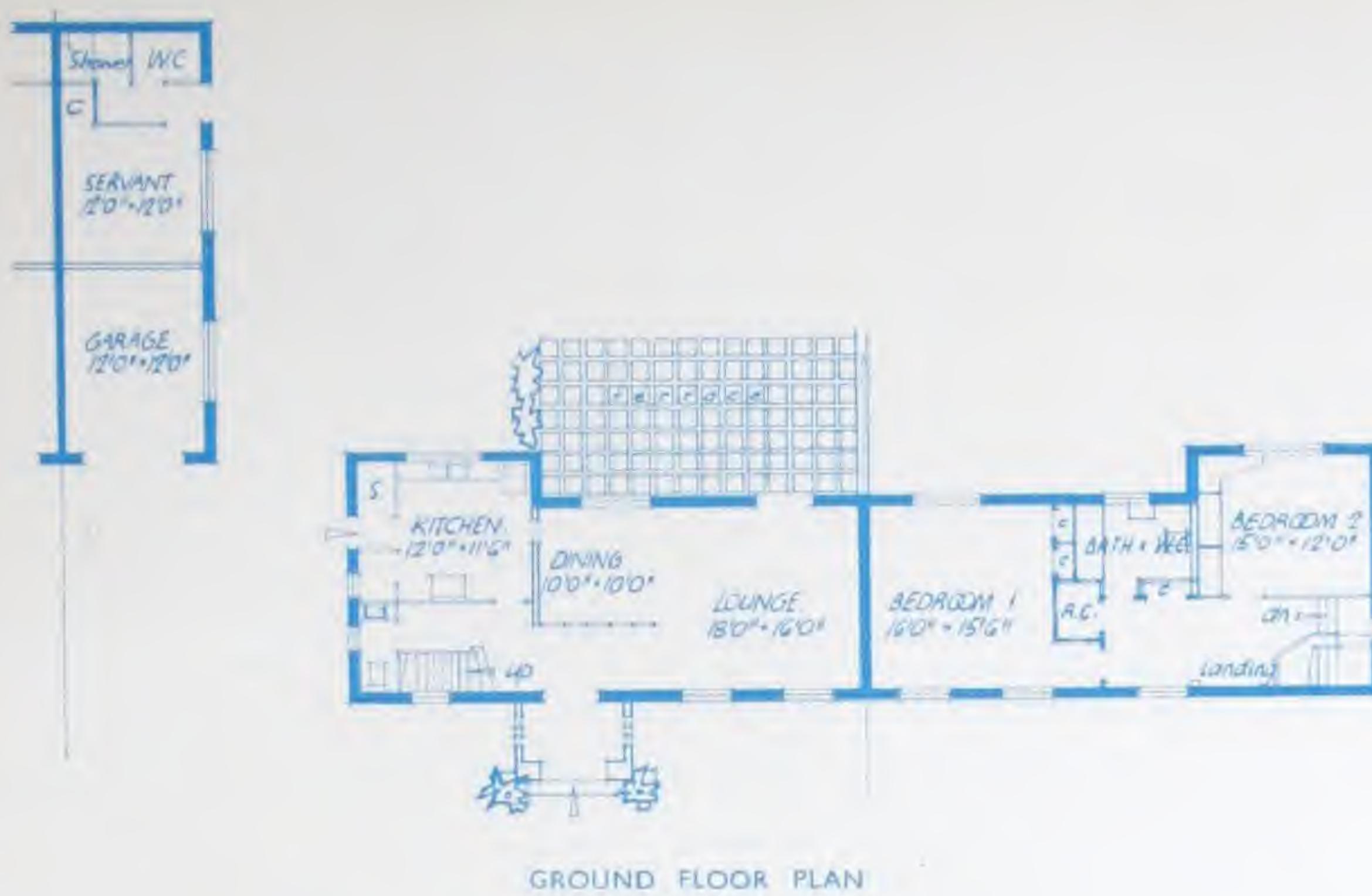
FRONT ELEVATION OF STAFF FLATS



TWO - BEDROOM STAFF FLATS

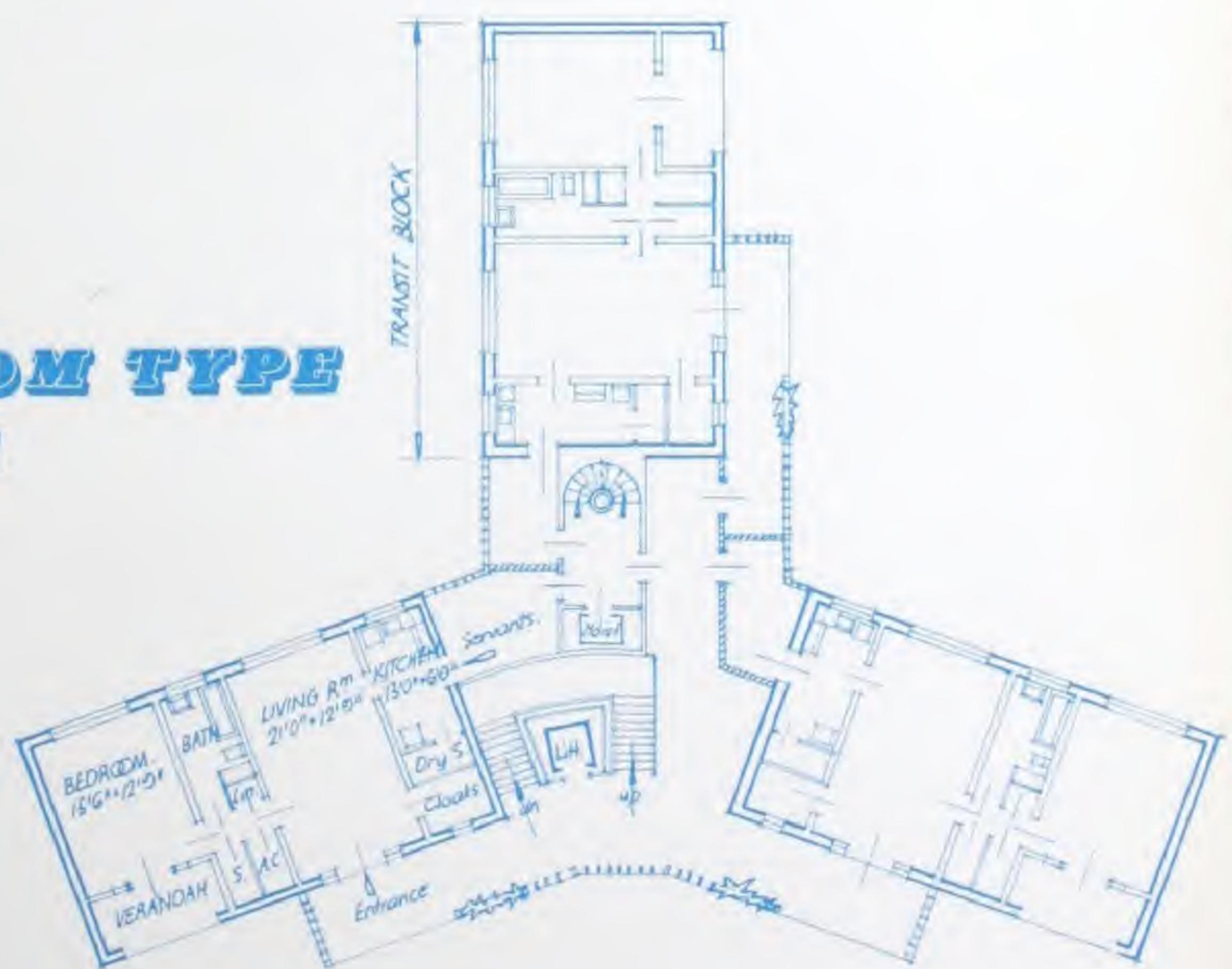


TYPICAL FLOOR LAYOUT



SEMI-DETACHED TWO-BEDROOM STAFF HOUSE

ONE-BEDROOM TYPE STAFF FLATS



NO-FINES EXTERNAL WALL FINISHES

The specimens shown are representative of the variety of No-fines surface finishes which can be obtained with pebble-dash renderings. Local stones are frequently available and may be equally satisfactory for use in this type of finish.

Derbyshire spar

A white crystalline limestone, usually cubical in shape, composed of pure calcium carbonate. Two qualities are obtainable, in which the second grade contains more brown and black particles. This grade is particularly effective when used on large areas of rendering, owing to the coloured stones imparting more character to the surface than would be obtained with large expanses of pure white spar.

Somerset quartzite

A maroon-red sandstone obtained in the West Country. Being angular in shape it affords good adhesion with the rendering and weathers well under most conditions. Local sandstones of similar shade are equally suitable.

Dalbeattie granite

A bluish-white sparkling granite aggregate quarried in Scotland. It is similar in appearance to the pea gravel obtained as a waste product of the Cornish clay industry, by which it may be replaced.

Portland stone

Representative of the oolitic limestones, being creamy white in colour. The material generally weathers well, but if used in industrial areas may be affected by soot-laden atmospheres to the same degree as stone block construction.

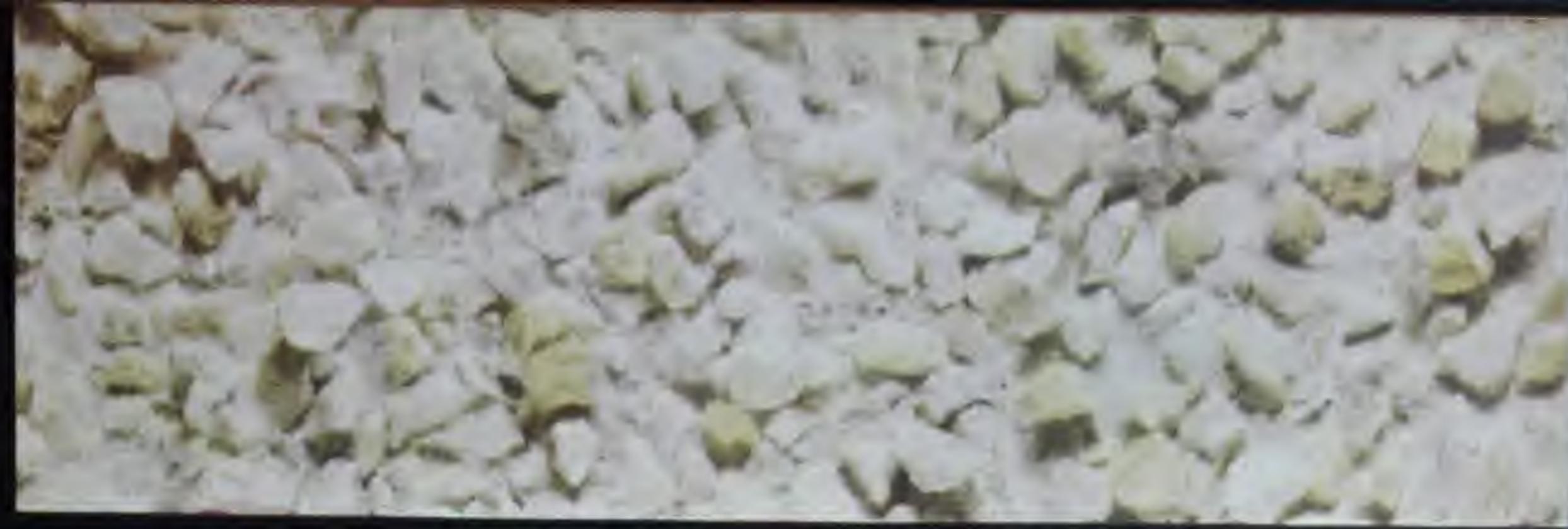
Ham River gravel

Typical of many river gravels which can be obtained locally, providing a hard-wearing finish of buff to brown shades.

Canterbury durite

Included as a material used fairly extensively but prepared from natural aggregates by a special process. The colour is a mixture of pure white, red, brown, and black. This type of surface finishing material is light in weight and readily applied.

Derbyshire spar



Somerset quartzite



Dalbeattie granite



Portland stone



Ham River gravel



Canterbury durite



WIMPEY TECHNICAL SERVICES

The contracting organization that seriously tackles the sustained development of a new construction requires to establish technical services which, in the past, would not have been considered as falling within the sphere of a contractor's activities. It is, however, essential that qualified technicians play their part.

Our Chief Architect, who originated our No-fines technique, has organized an architectural service, the whole spirit of which is to provide the means by which the contractor can collaborate with the architectural profession to obtain the best results from No-fines construction.

In the early days it was usual for us to be approached by an architect with a scheme already designed on traditional lines, and although in most cases we were able to produce a satisfactory alternative in No-fines, we are now finding that a very much happier collaboration is developing, whereby our technical staff are called in at a much earlier stage, and invited to give advice and make suggestions before the detail planning has gone too far. The 'know how' can make a big contribution.

Design development is also continually undertaken by our own Architects' Department, which has the advantage of being able to work in close association with our Structural Engineers, Managers of the Operating Departments, Estimators, Plant and Labour Organizers, Time Study Experts, Surveyors and last, but not least, the Scientist from the Wimpey Central Laboratory.

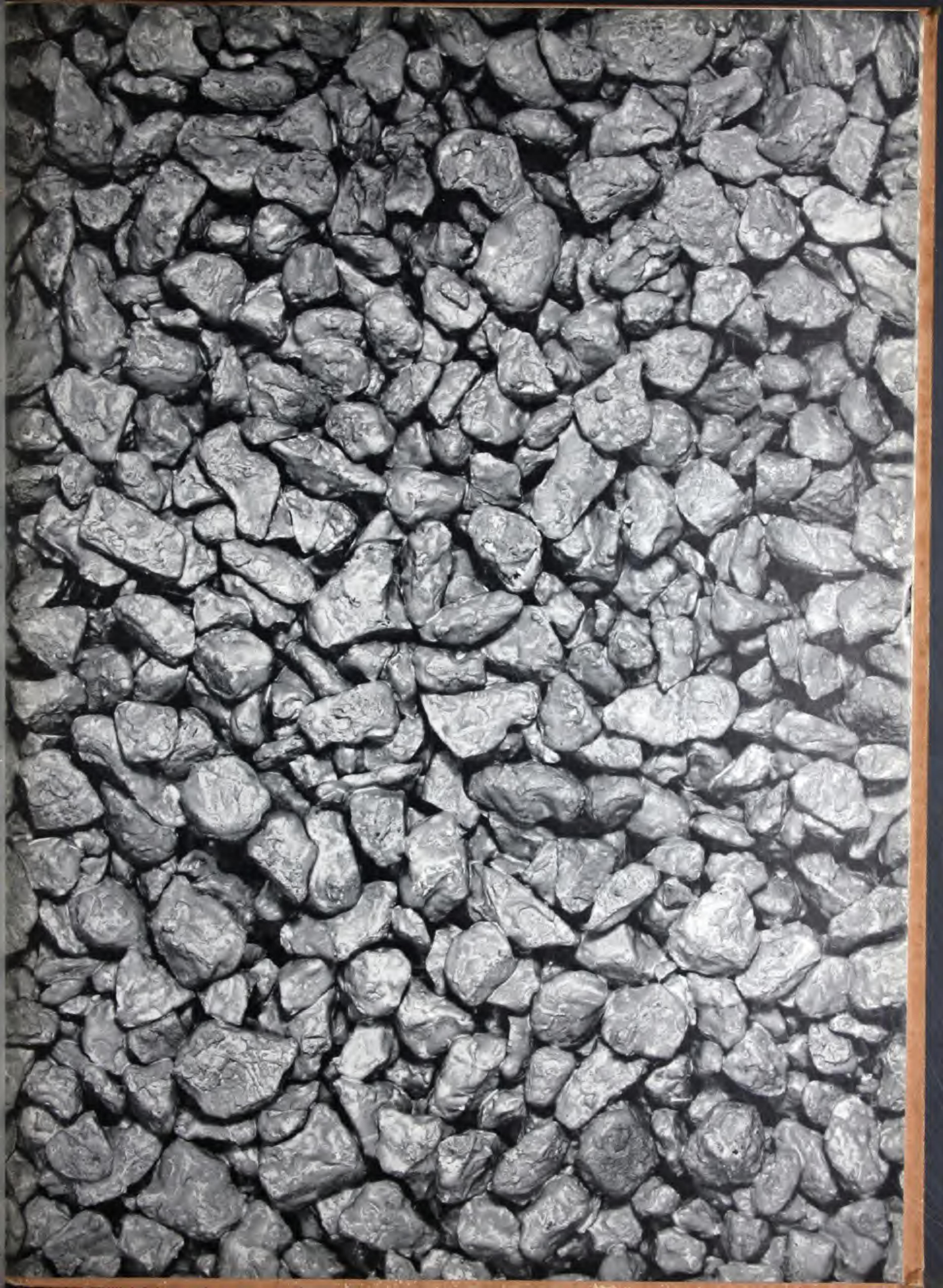
The same team is equally prepared to advise when No-fines construction is not suitable for any particular project.

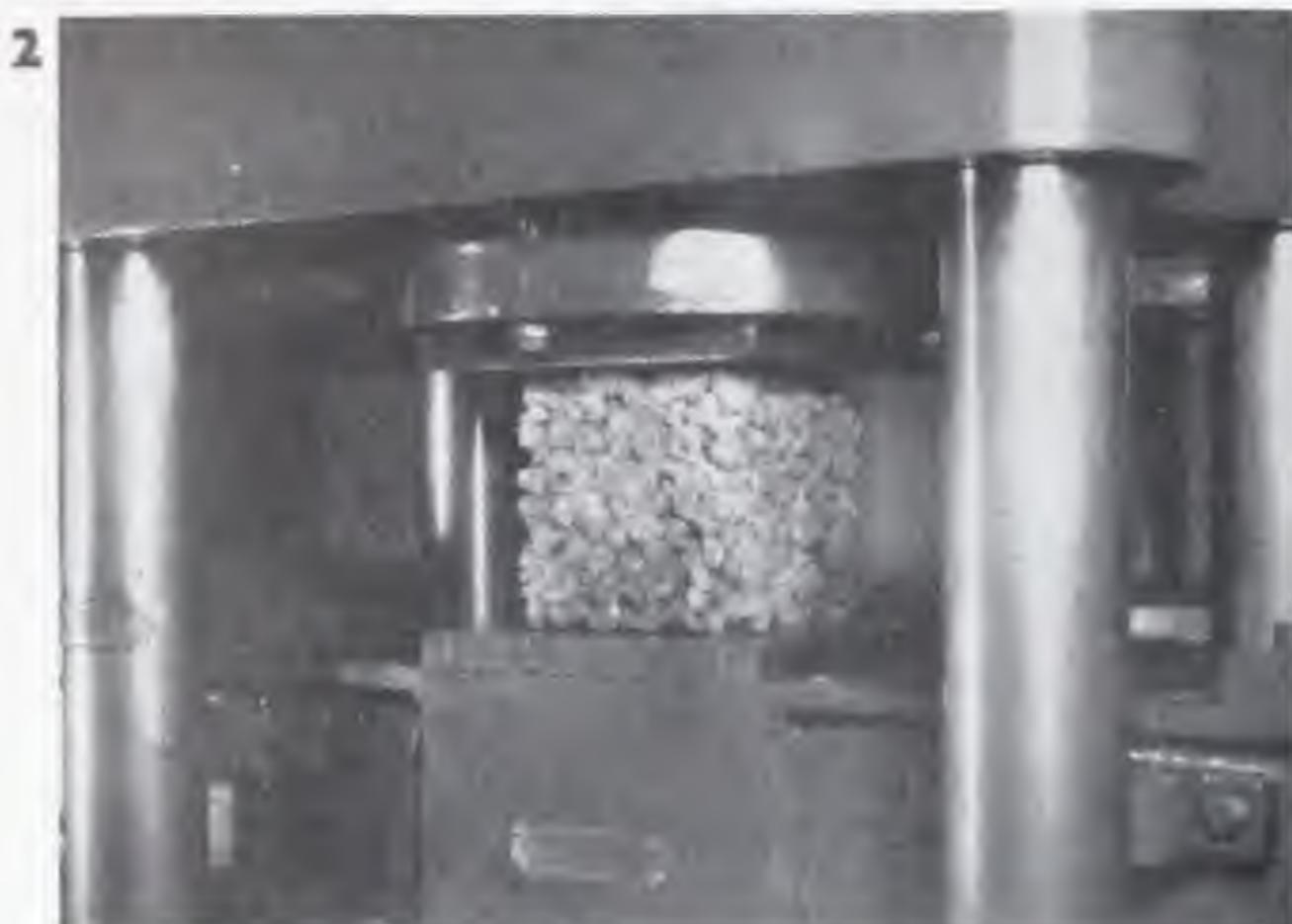
The Technical Service also includes a Surveyors' Department, with teams undertaking surveys in all parts of the world, and preparing the subsequent design, where required, of Town Planning layouts, complete with drainage, water supply and other facilities. Again, the keynote is collaboration with the authorities concerned.

The Wimpey Central Laboratory also has a world-wide service run by their Soil Mechanics' Section for subsoil investigation.

The technical service does not stop when the designs and contract are approved. Apart from the association of the Wimpey Central Laboratory with development, the Laboratory plays an unspectacular but none the less important part throughout the contract. Samples of concrete aggregates are submitted to the concrete section, and reports are given on the quality and suitability of these materials before supplies are ordered. Test cubes are sent to the Laboratory from every site, thus enabling a constant watch to be kept on the quality of both No-fines and dense concrete, and ensuring that the materials actually used are up to the standard of samples previously tested and approved. A detailed statistical study is made of all test cube results and

cont'd overleaf





1 Experiments being made in the Wimpey Laboratory on the efficacy of mould oils on the No-fines shutters.

2 A No-fines concrete cube being tested for compression strength in the 200-ton Avery hydraulic press.

3 The result of the strength of the No-fines cube is recorded on the dial of the Avery press.

the Operating Departments are kept fully informed.

The Laboratory also provides a service for sampling and quality testing all the materials that are used in the building industry, particular attention being given to any new proprietary materials that may come on the market from time to time. Other research work has been undertaken into problems of heat and sound insulation and on the development of methods enabling No-fines construction to be used in tropical climates.

Members of all the technical staffs make a point of maintaining close contact with the Operating Departments by visiting sites and keeping alive constant collaboration for the further improvement of the Wimpey No-fines construction.



ARCHITECT-CONTRACTOR COLLABORATION

The challenge of the national housing need brought many non-traditional systems on to the market in the immediate post-war period. Since then these systems have been subject to the chastening of 'value for money'.

It is true to say that the Wimpey No-fines construction is one of the few that has not only survived, but has developed far beyond the original conception. Wimpeys, convinced that No-fines construction could compete successfully in many fields with traditional construction, decided, as a definite policy, to develop its potential adaptability in every possible way to meet the demands of the designer. From this has grown an unprecedented Architect-Contractor collaboration, as will be seen from the illustrations contained in this book.

The continued facility of the Wimpey No-fines construction to meet all the demands made on the Building Industry might well pose the question:

'HAS NON-TRADITIONAL BECOME THE NEW TRADITION?'

Readers will appreciate that in producing a book of this nature, encompassing such a wide range of contracts, to give acknowledgements to Designers and Authorities has presented some difficulties. Although we have attempted to give acknowledgements where due, if some names have perchance been omitted, we apologise to the Designers and Authorities concerned.

WIMPEY



